Pension Funds and Socially Responsible Investing

Determinants of the SRI Behavior of Swiss Pension Funds

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Zurich, October 27, 2010

The Dean: Prof. Dr. Dr. Josef Falkinger

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Zurich, October 2010, Alexander Seidler (alexseidler@yahoo.com)

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List of Abbreviations

AHV	Federal Old-Age insurance
BVG	Federal Law on Occupational Old-Age, Survivors and Disability Benefit Plans
BVV2	Ordinance on the Occupational Old-Age, Survivors and Disability Benefit Plans
CDP	Carbon Disclosure Project
CEO	Chief Executive Officer
CHF	Swiss Francs
CR	Corporate Responsibility
DB	Defined Benefit
DC	Defined Contribution
DJSI	Dow Jones Sustainability Index
EAI	Enhanced Analytics Initiative
EIRIS	Ethical Investment Research Service
ESG	Environment, Social, Governance
Eurosif	European Social Investment Forum
FSO	Federal Statistical Office
GDP	Gross Domestic Product
GMO	Genetically Modified Organisms
GRI	Global Reporting Initiative
HNWI	High Net Wealth Individuals
IA	Invested Assets
ICCR	Interfaith Center for Corporate Responsibility
NGO	Non-Governmental Organization
OECD	Organisation for Economic Co-operation and Development
OR	Swiss Code of Obligations
SEE	Social, Environmental, Ethical
SIF	Social Investment Forum (United States)
SIO	Social Investment Organisation (Canada)
SIP	Statement of Investment Principles
SPFS	Swisscanto Pension Fund Survey
SRI	Socially Responsible Investment
UKSIF	United Kingdom Social Investment Forum

UN	United Nations
UNGC	United Nations Global Compact
UNEP FI	United Nations Environmental Program Finance Initiative
UNPRI	United Nations Principles for Responsible Investment
WCW	Who Cares Wins Initiative

Abbreviations for Pension Funds

ABP	Arbeidsongeschiktheids Pensioen (Pension Fund for Employers and Employees in Service of the Dutch Government and the Educational Sector)
AP1-4	Swedish National Pension Funds
	AP1: Första AP-fonden (First Swedish National Pension Fund)
	AP2: Andra AP-fonden (Second Swedish National Pension Fund)
	AP3: Tredje AP-fonden (Third Swedish National Pension Fund)
	AP4: Fjärde AP-fonden (Fourth Swedish National Pension Fund)
CalPERS	California Public Employees' Retirement System
CalSTRS	California State Teachers' Retirement System
CIA	Caisse de Prévoyance du Canton de Genève (Pension Fund of the Canton of Geneva)
ERAFP	Etablissement de Retraite Additionnelle de la Fonction Publique (French Public Service Additional Pension Scheme)
FRR	Fonds de Réserve pour les Retraites (French Pensions Reserve Fund)
NGPF	Norwegian Government Pension Fund
NPRF	Irish National Pension Reserve Fund
NYCERS	New York City Employees' Retirement System
NZSF	New Zealand Superannuation Fund
PFZW	Stichting Pensioenfonds Zorg en Welzijn (formerly PGGM)[1]
PGGM	Pensioenfonds voor de Gezondheid, Geestelijke en Maatschappelijke Belangen (Pension Fund for Health, Mental and Social Interests)
TIAA-CREF	Teachers Insurance and Annuity Association of America – College Retirement Equities Fund
USS	Universities Superannuation Scheme

[1] On 1 January 2008, PGGM changed its name to PFZW as part of a restructuring that involved the separation of its asset management operations. PFZW uses the PGGM brand to market its asset management services.

1. INTRODUCTION

Socially Responsible Investments (SRI) are a rapidly growing segment of the asset management industry. In the United States, by the end of 2008 roughly 11% of invested assets (IA) were reported to be invested in SRI. From 2005 to 2007 alone, SRI IA increased by more than 18%, while total IA increased by less than 3%.[2] Although at a substantially lower level, a similar trend can be observed for the Swiss market, where by the end of 2009 SRI IA reached an all-time high with a total of CHF 34.1 billion corresponding to around 3% of the market. Compared to 2005, this represents an increase of 220.6%, showing that in recent years growth in SRI has considerably surpassed growth in conventionally IA.[3] Many observers expect the SRI market to grow further in coming years. For example, Robeco, a Dutch asset manager, sees SRI becoming mainstream within the asset management business, reaching between 15 – 20% of total global IA by 2015.[4]

The growing maturity of the SRI market is accompanied by the increasing complexity of the players involved and the types of products and services offered. Today a considerable number of specialized SRI asset managers, as well as conventional financial institutions, provide an ever-increasing variety of products and services to their clients. Previously this offering consisted of only a handful of equity-based mutual funds. Today it encompasses all asset classes, including fixed income, real estate, commodities, private equity and venture capital or hedge funds. This development has gone hand in hand with the increased coverage of SRI within the academic field. A substantial body of literature has accumulated over past decades, extensively examining a wide range of issues, such as the possible link between a company's corporate responsibility (CR) performance and its financial performance. In fact, the growing evidence about the materiality of a firm's CR performance has lead to a shift in the legal opinion concerning the integration of SRI aspects into conventional investment analysis. While at an early stage of SRI the integration of such aspects was considered contrary to standard financial practices and as a violation of fiduciary duties, today evidence about the materiality of CR makes the integration permissible, or as some suggest, even required from a fiduciary perspective. Accordingly, while at an early stage this form of investing was restricted only to a small group of ethically-minded investors, this shift in the legal opinion substantially contributed to the more favorable perception of SRI among many mainstream practitioners today. As a consequence, what started as a fairly marginal investment practice by certain religious groups or other mission-based organizations and which was at odds with standard financial practice, has in the meantime grown into an investment strategy that is increasingly adopted by a wide range of mainstream investors including many pension funds.

Pension funds, which are at the head of the investment value chain, have steadily increased their interest in SRI and as a result have become a major driver of this form of investment in

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[2] See Social Investment Forum (2008, p. iv)

[3] See onValues (2010), Eurosif (2008, pp. 11, 46)

[4] Robeco, Booz & Company (2008)

various markets. The idea that pension funds may have a special role to play in promoting higher levels of CR through engaging in SRI and thereby may contribute towards more sustainable societies has increasingly been discussed in recent years, not only within restricted circles of experts, but also in wider public debates. A number of countries, including the United Kingdom, France, Belgium, Germany and Australia have even passed legislation that seems to be inspired, at least in part, by this idea. Amalric describes the growing interest by pension funds in acting as "responsible" shareholders as the result of a number of coexisting and interrelated trends.[5] First, pension funds have grown substantially over recent decades, resulting in their ownership of an increasing proportion of outstanding corporate shares. This concentration of ownership (which Drucker described as an "unseen revolution" in the ownership of corporate America[6]) seems to give pension funds, at least in theory, enough investment power to hold corporations accountable. Second, there has also been growing public attention for the wider issue of sustainability, which for many has culminated in concerns about climate change. This development is closely linked with the view that in a global context corporate practices especially in an environmental or social context are often not sufficiently regulated by nation states, thereby allowing firms to externalize their costs to society in situations where no regulation exists or where rules are not sufficiently enforced. Finally, even before the recent financial crisis there was a growing perception that larger investors, similar to other groups of corporate stakeholders such as clients, employees or civil organizations, have an important role to play in supervising corporate practices. As a consequence of these trends and under the combined pressure of pension fund beneficiaries, domestic legislation and public opinion, pension funds in many countries are increasingly adopting SRI principles in their investment and ownership practices.

1.1. Research Question

Despite growing awareness about the role of pension funds, limited understanding still exists as to what drives pension funds when they engage in SRI and what strategies they should pursue in order to effectively meet their underlying objectives. In the light of their key role in the SRI market, the two central research questions in this dissertation are to explain how and why pension funds engage in SRI. That is, the initial aim is to provide a detailed overview of existing SRI practices and the second aim is to explore the underlying rationale for their SRI behavior by testing for specific explanatory fund characteristics. For this purpose data is used from a sample of Swiss pension funds provided by Swisscanto Asset Management (Swisscanto).

In addition to the author's close proximity to the Swiss SRI market, there are a number of other reasons why this thesis is focused on the Swiss pension system. First, although there is

[5] See Amalric (2004a, p. 1). From 2004 – 2006, the author of this thesis worked as a research assistant at the Center for Corporate Responsibility and Sustainability at the University of Zurich, focusing on a research program on the role of pension funds in promoting sustainability. This represents the basis of this thesis.

[6] See Drucker (1976)

some anecdotal evidence on the SRI behavior of Swiss pension funds, to date there has been no exhaustive quantitative study addressing the subject. Second, the Swiss pension fund system is a highly developed market with a considerable degree of diversity in terms of the general investment policies of pension funds, their institutional set-up, or the level of benefits and contributions they provide to their beneficiaries. As a result of this it is anticipated that there is considerable heterogeneity in the SRI behavior of Swiss pension funds, thereby challenging the commonly accepted view that as fiduciary investors pension funds have only very limited room for maneuver in this field. Finally, data shows that demand for SRI from Swiss pension funds lags behind the demand from pension funds in other countries such as the U.K., the Netherlands or Scandinavia. While in these countries the institutional share in the SRI market accounts for up to 90% of the total, the Swiss SRI market has been more evenly balanced in terms of demand by private and institutional investors. Partly, the limited demand by institutional investors can be explained by the absence of regulatory incentives. In other countries pension funds are incentivized to engage in SRI by such requirements, but no such incentives exist in Switzerland. As a result, the Swiss case provides an ideal example to investigate the role of other potential drivers for pension funds to engage in this form of investment.

As will be shown in this thesis, in general SRI practices among pension funds are very diverse. While pension funds in the U.S., the U.K., the Netherlands, Australia, France or Scandinavia have acted as thought leaders by developing comprehensive SRI strategies that considered SRI criteria across all asset classes, in Switzerland, so far this development has been limited to only a handful of mostly public pension funds such as the Cantons of Geneva and Zurich or collective institutions such as Nest or Abendrot. These institutions stand out by having established a comprehensive SRI strategy that is also disclosed publicly. In addition, anecdotal evidence suggests that there are certain funds that have approached SRI in various ways, but which have not taken a public position on this subject. To obtain a comprehensive understanding of current practices, a central part of this thesis is attributed to a detailed description of how Swiss pension funds engage in SRI. As will be shown there is a greater involvement among Swiss funds in SRI than generally reported. Furthermore, we will show that their SRI practices are very diverse in terms of scope, preferred approaches or asset classes. Finally the analysis confirms that few funds currently apply a comprehensive strategy, whereas most funds treat SRI rather as a "nice to have", which raises questions about their underlying objectives for engaging in SRI.

In order to better understand these underlying objectives, a second research question asks why certain pension funds engage in SRI, while others do not. Interestingly, the analysis shows that although as fiduciaries pension funds are bound by wealth maximization objectives, the reality seems more complex, as some funds appear also to have non-financial reasons for investing in this way. This suggests that neither purely performance-based nor ethical arguments satisfactorily explain current SRI practices by Swiss pension funds. While the performance argument does not sufficiently echo the basic intuition as to why pension funds may have a special role to play in promoting CR or sustainability, the ethical argument seems in direct opposition to the fiduciary responsibility of pension fund trustees. To gain more clarity regarding possible determinants of their SRI strategies, we integrate different theoretical perspectives regarding the relationship between pension fund characteristics and a fund's propensity to engage in SRI.[7] On the one hand, our results show that pension funds are a very diverse group of investors that differ in many ways. On the other hand, despite this great diversity, the results further show that there are some common characteristics among those funds that engage in SRI and which help to explain why they are more responsive to this form of investment. Although some of these characteristics are not specific to pension funds, this finding is in line with the view of many proponents of SRI that consider pension funds as having distinct attributes which qualify them as ideal SRI investors.[8]

1.2. Structure and Key Contributions

In order to answer the two key research questions of how and why Swiss pension funds engage in SRI, the thesis is composed of three main parts. It starts with an extensive overview of SRI, which will provide the basis for understanding how investors can act in a socially responsible manner. This is followed by a description of the SRI behavior of Swiss pension funds. Finally, a third part includes an empirical analysis of distinct pension fund characteristics that should explain why some funds engage in SRI while others do not. The overall structure of the thesis is displayed in Figure 1.

FIGURE 1 – THESIS OUTLINE

1 – Introduction				
Research question	Structure and key contributions	Sources of Information	Methodology	
2 – Socially Responsible Investments Defined				
Definition	Terminology	Approaches	Investors	Effectiveness of strategies
3 – The SRI Behavior of Swiss Pension Funds				
Swiss SRI offering	SRI behavior of Swiss pension funds			
4 – Determinants of the SRI Behavior of Swiss Pension Funds				
Stakeholder characteristics	Portfolio characteristics	Institutional characteristics		
5 – Methodology and Survey Results				
Database	Sample characteristics	Variable descriptions	Methodology and summary statistics	
6 – Analysis of Results				
Stakeholder characteristics	Portfolio characteristics	Institutional characteristics		
7 – Conclusion and Research Outlook				

Source: Own illustration

Chapter 2 provides the necessary theoretical background on SRI. It is largely conceptual and aims to give a comprehensive overview of this multifaceted concept by looking at it from dif-

[7] See Johnson, Greening (1999, p. 572)
[8] See Szczesny, Wilhelm (2005)

ferent angles. It starts with a first section on the definition of SRI as a high level concept (see section 2.1), followed by an overview of related terminology (see section 2.2). Section 2.3 then outlines different SRI approaches and techniques, including positive and negative screening, shareholder engagement, environment-social-governance (ESG) integration or community investment. These first introductory sections show that there is still substantial confusion relating to the use of terminology, concepts and definitions, which vary considerably among different market participants and across different markets, creating problems to define clear boundaries. In section 2.4 we turn to SRI investors, by exploring who is engaging in SRI and for what reasons, while trying to establish a typology of SRI investors. We show that a number of different motivations exist for investors to engage in SRI, including ethical but also financial factors as a result of which there is considerable diversity among SRI investors. In an attempt to classify these investors we categorize them according to how they combine ethical and financial motivations. Within the proposed typology, pension funds are categorized as SRI investors that by definition have a strong shareholder value focus. Finally, in section 2.5 we consolidate the findings of the previous sections by examining to what extent the different approaches are effective in meeting the varying motivations of investors. We thereby show that the effectiveness of different SRI strategies in meeting the underlying objectives of SRI investors varies considerably. For example, we show that ‘value consistency’ can best be achieved through negative screening, while shareholder engagement seems more effective from the perspective of having an impact on a target company. In contrast, investors primarily driven by financial self-interest should focus more on shareholder-value based strategies that factor material CR issues (e.g. through ESG integration, thematic investments or best in class selection). By providing this overview we challenge and debunk a number of persistent myths, which on the one hand oppose the further advancement of SRI (e.g. by claiming that SRI systematically underperforms against conventional benchmarks), while on the other hand, being used by providers of SRI products to artificially attract demand from investors (e.g. by stating that by investing in any form of SRI, investors can impact corporate behavior). An important aspect of this chapter is that throughout the sub-sections we look at SRI as an evolutionary concept by showing how the definitions, terminology and underlying approaches, as well as the composition of the SRI investor base, have matured over time and continuously increased in complexity. This section concludes that as with other actively managed products, SRI products are also only as good as their investment managers and the respective underlying financial analysis and that the challenge for pension funds is to find the best managers for the respective products.

Chapters 3 – 6 present and explore the empirical data. First, building on the framework developed in chapter 2, chapter 3 examines the specific role of Swiss pension funds with regard to SRI and provides a description of the main features of their current SRI practices. In order to gain a better understanding of the domestic SRI market, section 3.1 begins with an overview of this market (for the period 2006 – 2009) by reviewing data from onValues, a Swiss investment consulting firm specialized in the SRI field. This first section shows that despite the lack of any regulatory drivers, the Swiss market is at an advanced stage in terms of total SRI IA and also with regard to the diversity of products and services offered by specialist providers, alternative and niche distributors, as well as mainstream banks that increasingly recognize the market potential in this field. In section 3.2, we complement the market review by exploring what pension funds effectively do when they engage in SRI. This second part is based on data obtained through an institutionalized pension fund survey conducted by Swisscanto. This empirical section provides a detailed picture of the demand side of the equation, showing that in the Swiss market private investors play a relatively important role as compared to other countries. Although institutional investors seem to play only a relatively limited role, the data provided by Swisscanto shows strong evidence that there are actually more pension funds engaging in SRI than commonly reported. Moreover, the data shows that there is a considerable diversity of approaches and views among Swiss pension funds with regard to SRI. However, while some funds already apply a comprehensive strategy across all asset classes, most pension funds engaging in SRI still focus their SRI commitment only on a part of their equity portfolio, which suggests that certain SRI strategies lack consistency with regard to the underlying objectives. Nevertheless, overall these findings suggest that there is growing interest among pension funds and further market potential for the providers of SRI products.

While chapter 3 describes how pension funds engage in SRI, chapter 4 begins to answer the question of why some funds engage in SRI while others do not. To better understand the reasons for this, we explore to what extent the SRI behavior of pension funds can be explained by referring to specific pension fund characteristics. That is, we summarize a number of propositions that specify the conditions under which pension funds are more likely to engage in SRI. On one hand we thereby challenge conventional wisdom that pension funds are a homogeneous group of investors and suggest that the SRI engagement by pension funds may depend upon a larger number of variables. On the other hand, we argue that pension funds that engage in SRI actually share certain common characteristics, some of which can specifically be attributed to pension funds, while others may also hold for other institutional investors. In order to get an understanding of these characteristics, we propose an analytical framework in which the relationships between these characteristics and the SRI behavior of the funds are explored. To the extent that there is currently no comprehensive theoretical model available which would sufficiently explain the SRI behavior of pension funds we reference different strands of literature and recall earlier studies that identified mechanisms of decision-making by institutional as well as private investors with regard to SRI. As a result, we propose three sets of characteristics that are related to a fund's investment decision process and that we believe offer the greatest explanatory potential to distinguish between pension funds that engage in SRI and those that do not. First, in section 4.1 we explore the influence of different stakeholder groups. In section 4.2 we analyze how specific portfolio characteristics affect the capacity of a fund to engage in SRI, and finally section 4.3 assesses the role of certain institutional characteristics. Each characteristic is analyzed in relation to the potential SRI behavior of a pension fund, followed by a short review and synthesis of the existing literature and concluding with the formulation of the testable hypotheses. By exploring these potential determinants on the basis of the existing literature and practices by foreign pension funds, the thesis tries to contribute to the better understanding of why pension funds engage in SRI and explores possible incentives that could also lead to greater monitoring of corporate behavior in the Swiss context.

Chapter 4 forms the background to the empirical analysis conducted in chapter 5, where we introduce the data (see section 5.1), the corresponding sample (see section 5.2) and define the variables used in the analysis (see section 5.3). In section 5.4 we then present the strategy of inquiry and the methodology for testing the hypotheses followed by an overview of the results of the logistic regression analysis applied alongside summary statistics. The main empirical findings are as follows: A key determinant of the SRI behavior of Swiss pension funds concerns their financial perception of SRI in terms of long-term performance, increased costs and risks. The role of the employer also turns out to be a significant factor. In particular, examining the role of the legal form of a pension fund shows that public institutions are more likely to engage in SRI than private institutions. For private institutions however, pension funds seem more likely to engage in SRI in cases where the sponsoring institution is also committed to such principles (e.g. through its own CR strategy). Furthermore, beneficiaries have considerable influence, either by actively raising the need for SRI with their trustees or when pension fund trustees independently consider SRI as being in the best interest of their plan participants. In contrast, the presence of investment consultants or reliance on external asset managers seems to act rather as an obstacle for the development of a SRI strategy among Swiss pension funds. The results also show that certain characteristics commonly considered as key factors for the SRI engagement of pension funds, such as their size, their coverage ratio or the plan type, do not play a role.

Based on the data introduced and the analysis provided in chapter 5, chapter 6 contains a detailed discussion of the results for each variable. In addition to the results from the logistic regression, individual cases are examined to better understand the variety of rationales for pension funds to engage in SRI. In fact, as will be shown, there is evidence that pension funds are not only shareholder value driven when they engage in SRI, but also have normative reasons, suggesting that they have considerable room for maneuver to apply SRI criteria in their investment and ownership strategies. The analysis is complemented by specific recommendations to various stakeholder groups including pension fund trustees, regulators, beneficiaries and employers, asset managers and consultancies that already provide SRI products as well as those that do not yet offer such services to pension funds. As will be argued, each of them has a certain role to play in contributing to the interest of pension funds for SRI and thereby to the development of a truly ‘sustainable’ retirement system.

Chapter 7 concludes the dissertation and reports implications regarding the role of pension funds with regard to SRI while also suggesting a direction for future research.

1.3. Sources of Information

The information used throughout this thesis comprises secondary data from different studies carried out in this field, as well as primary data gathered in the form of interviews with either providers of SRI products and services or pension funds. Regarding the latter we first used data gathered by the Zurich based investment consultancy firm onValues to gain a better understanding of the supply of SRI investment solutions proposed by Swiss asset managers. The data used to answer our two main research questions is largely based on data obtained through the annual Swisscanto pension fund surveys (SPFS) 2002 – 2009. These surveys each include a standardized section consisting of questions relating to general pension fund issues such as their name, contact details, legal and administrative form, number of beneficiaries, information about balance sheets (e.g. assets and liabilities), profit and loss accounts (e.g. administrative costs, performance data) and contributions. The data obtained from this standardized section as of the end of 2007 provides the basis for examining possible determinants of the SRI behavior of Swiss pension funds. In addition, it also includes a single question dealing with the share of the pension portfolio invested according to SRI criteria, which will be used as an independent variable throughout this thesis. Finally, in its 2008 edition, the Swisscanto survey contained a separate and very detailed section on SRI, on which the descriptions of the SRI behavior of Swiss pension funds is based.[9]

1.4. Methodology

In this thesis we use a two-stage regression analysis for hypothesis testing and modeling the relationship between pension fund characteristics and the SRI behavior of Swiss pension funds. Initially, bivariate logistic regressions are run to examine individual relationships and to gain preliminary insights about irrelevant predictors and identify problems of collinearity among explanatory variables. Subsequently, the insights gained from the bivariate analysis serve as a basis to conduct a multivariate analysis in which we simultaneously examine a selection of possible determinants.

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[9] For a copy of the SPFS 2008 questionnaire see section 8.1.

2. SOCIALLY RESPONSIBLE INVESTMENTS DEFINED

SRI is a subject that has evolved into different strands over time and different regions and as a consequence means different things to market participants. In this chapter we will show how SRI has grown and matured over time, in the sense that it has become more complex and diverse with regard to the definitions, terminology and the underlying approaches used by different types of investors. To reflect the diversity of the subject this background chapter examines SRI from various angles, starting in section 2.1 with a basic definition of SRI, followed by a short review of related terminology in section 2.2. Section 2.3 then provides an overview of SRI techniques such as screening, ESG integration, shareholder engagement and community investment. Section 2.4 looks at the evolution of SRI by introducing different types of investors as well as their underlying motivations for engaging in SRI. Finally, section 2.5 combines the findings from section 2.3 and section 2.4, by exploring the effectiveness of different SRI strategies in meeting the underlying motivations of investors for engaging in SRI. Thereby this chapter provides the necessary background for chapter 3, in which we examine the SRI behavior and attitudes of Swiss pension funds. It is important to note that this background chapter does not lead to a definite answer of what SRI is. Rather it provides a snapshot of what is currently considered SRI and tracing a chronology of what has been considered as SRI over time, while being aware that market participants will continue debating definitions and terminology with the objective of further advancing existing concepts.

2.1. SRI DEFINITION

A considerable number of definitions for SRI exist from academics and practitioners alike. Some selected examples are included in Table 1.

TABLE 1 – SRI DEFINITIONS

Source	Definition	Restriction
Eurosif (2006)	[SRI] combines investors' financial objectives with their concerns about social, environmental and ethical issues.	Definition does not include corporate governance issues.
Social Investment Organization (2007)	[SRI] is the integration of environmental, social and governance (ESG) factors in the selection and management of investments.	Definition does not include ethical but corporate governance issues.
Hudson (2006, p. 1)	[SRI] is an approach to investing driven by the value system of the key investment decision-maker. [...] More specifically, SRI entails taking environmental, social, ethical and governance factors into account in the construction of portfolios or in the choice of investments more generally.	This values focused definition does not consider conventional investors that engage in SRI for purely financial reasons. Moreover it focuses on investment decisions but does not include responsible ownership.
CFA Institute (2008, p. 22)	[SRI is an] investment process that seeks to achieve social and environmental objectives alongside financial objectives.	This definition presupposes that SRI investors pursue a combination of both financial and ethical objectives.
Deutsche Bank Research (2007, p. 2)	In essence, SRIs strive to consider both the financial return of an investment and its social, environmental and ethical consequences.	This definition assumes that SRI investors are impact driven in the first place.

Source: Own illustration

As shown in Table 1, these definitions all vary to some degree, some emphasizing issues such as the environment, social, and ethical or corporate governance aspects, while other definitions stress the capacity of SRI to either take account of social, environmental or ethical consequences of one's investment decisions (see CFA Institute and Deutsche Bank) or ensure value consistency (see Hudson). These definitions also share a common element, which will be used as basic definition for SRI throughout this thesis: **SRI is a form of investing that, in addition to traditional financial factors such as risk and return, also takes account of environmental, social, ethical or corporate governance aspects**.[10] A major advantage of this reduced definition is that it allows embracing all types of SRI sub-sets and thereby serves as an umbrella term avoiding implicit restrictions as shown in the definitions in Table 1. For example, to the extent that this definition does not specify how certain criteria are taken into account, it allows the different approaches outlined in section 2.3 to be considered as sub-forms of SRI (e.g. including responsible ownership practices). Also to the extent that it does not presuppose specific investor rationales or motivations (see the outline of ethical and financial rationales of SRI investors in section 2.4.2)[11], or how effective SRI is in terms of meeting these investor rationales (see section 2.5), this definition avoids excluding important aspects of SRI.

On the other hand, an obvious shortcoming of this definition is that it does not further clarify the specific principles or issues to be considered by SRI investors and may eventually cause confusion or ambiguity between different types of investors with regard to the meaning of the term. Consequently, critics argue that SRI is somewhat ill-defined or imprecise, making it difficult to draw clear boundaries of what SRI actually is.[12] This critique applies particularly to values-based or normatively oriented forms of SRI such as negative screening (see section 2.3.1) which typically reflect an investor's ethical preferences.[13] It's in the nature of things that such preferences could include a wide range of issues – even mutually exclusive strate-

[10] These aspects are sometimes referred to as intangibles, non-financial or extra-financial criteria. Some proponents of SRI (i.e. see Business for Social Responsibility (2008, p. 15) or the Enhanced Analytics Initiative (EAI)) explicitly avoid the term 'non-financial' as it creates an image of being non-substantive to the financial performance of a firm and they therefore use the term 'extra-financial' instead. Others use the term 'intangibles' (see De Groot, Churet, (2009)).

[11] For example, Knight and Dixon (2009, p. 5) distinguish between SRI and ESG integration according to the underling motivation of the investor. In their view, investors engaging in SRI are essentially motivated by ethical imperatives and aim to actively shape the market. In contrast, investors pursuing ESG integration are motivated by economic imperatives to the extent that this is a risk analysis tool aimed at capturing the effects of environmental, social and corporate governance considerations on the risk-adjusted return of portfolios. In contrast, for Sparkes (2001, p. 199) SRI has the same meaning as ESG integration for Knight and Dixon. He distinguishes between SRI and green investment such that in the former an investor is motivated by profit maximization objectives as opposed to motivations related to the encouragement of sustainable development for the latter.

[12] See Bengtsson (2008, p. 969), Signori (2009, p. 145), Berezin, Wood (2009, pp. 3-4)

[13] Schäfer distinguishes between normatively and economically-oriented forms of selection. While in the former selection criteria reflect ethical motivations (similar to those described under negative screening), the latter promotes criteria that are material to the financial performance of companies (see Schäfer (2005, p. 116).

gies.[14] For example, environmentally-oriented investors who feel strongly about the preservation of the environment may consider investments that factor in the environmental impact of a firm as SRI, while a faith-based investor may instead consider SRI as what is in line with his or her religious beliefs. The problem with this subjective application of the term is that each individual investor is likely to have his or her own ideas about what constitutes SRI.[15] Thus by applying such a definition, it is ultimately the values-based reasoning system of the investor to an ethical question that determines whether an investment is considered to be ethical and not the objective investment properties or the impact of the investment itself. According to Schwartz, this personalization of SRI puts "this subject into a subjective realm where it becomes difficult to conduct any thoughtful discussion or analysis".[16] In similar terms, Langbein and Posner criticize that "[t]here is no consensus about which social principles to pursue and about which investments are consistent or inconsistent with those principles."[17] The same critique may also be raised for more economically-oriented or shareholder-value based forms of SRI, such as best in class selection (see section 2.3.2.1) or ESG integration (see section 2.3.3). In these cases, the main challenge for a SRI investor is to conduct a materiality check of CR activities for a given sector in order to determine which issues he or she needs to consider. Such a SRI investor has to have a clear understanding of which CR activities are material and how they can be tracked and assessed in a reasonable way. But to the extent that society and the environment in which companies are operating are not static, there will always be new CR related risks and opportunities that are potentially material from a company perspective and relevant from the perspective of an SRI investor. Schröder concludes that: "it's easy to get agreement that [SRI] is about social, ethical, environmental and long term economic issues, but what lies behind those terms is very subjective".[18]

2.2. SRI Related Terminology

As a direct consequence of the great variety of SRI definitions, a large number of similar or related terms exist, showing that a coherent usage of the terminology is far from being established.[19] Related terms include ethical, values or mission-based, faith or morally responsible, green, social, socially aware/conscious investment, ESG, triple bottom line, sustainable or simply responsible investment. While these terms usually emerged within a particular context

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[14] See Brown (2007, p. 14). It is not surprising that there are funds with mutually exclusive screening strategies. An example cited by Dunfee (2003, p. 248) concerns the U.S. retail giant Wal-Mart which may be considered exemplary from an environmental perspective while not acceptable from the perspective of its respect for labor standards. The same goes for issues such as abortion, gay rights, nuclear power, etc. where perspectives among investors may differ fundamentally.

[15] See Perks et al. (1992, p. 43)

[16] Schwartz (2003, p. 208). Applied within the context of pension fund trustees investing on behalf of thousands of beneficiaries, it would be very hard to develop a common position on certain ethical questions (see section 4.1.3).

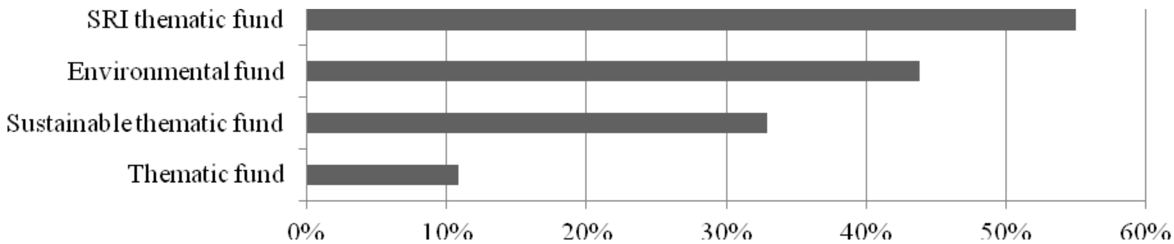
[17] Langbein, Posner (1980, p. 83)

[18] See Grene (2008)

[19] See Sparkes, Cowton (2004, p. 2), Thamotheram (2008)

over time, today they are often used interchangeably, or in some cases serve as synonyms for SRI. The variety of terms used is reflected by the results of a survey that tracked the labels of thematic SRI products (for more details on thematic SRI products see section 2.3.2.2). Results showed that while most asset managers use the term ‘SRI thematic fund’, others opted for ‘environmental fund’, ‘sustainable thematic fund’ or preferred more conventional labeling such as ‘thematic fund’ (see Figure 2). While these funds differ in a number of aspects, they have in common that for the selection of the portfolio asset managers combine financial and extra-financial criteria.

FIGURE 2 – DIFFERENT TERMS USED FOR THEMATIC SRI PRODUCTS



Source: Giamporcaro et al. (2007, p. 7)

Among these various terms ‘ethical investment’ and ‘SRI’ have been the two terms most commonly used labels in the past. In its original meaning, the term ethical investment is generally not about achieving some wider ethical end, such as promoting equality or justice in society, rather it refers to an investment approach through which the investor acts in accordance with his own ethical or moral standards.[20] For the Ethical Investment Association “ethical investment results in a personalized investment approach which takes account of an investor’s ethical values, codes or beliefs relative to a specific situation”.[21] According to Sparkes, it was in the 70s and early 80s that both the terms ethical investment and SRI became established by the introduction of specific products designed for the retail market.[22] At this stage, both terms were largely used as synonyms, but today their application is less consistent. While some still use them as synonyms, others point at their differences. The former simply consider ethical investment as the older term, which is now being replaced in general use by ‘SRI’.[23] They also point to regional preferences in the application of these two terms. For example, while ethical investment is a still widely used term in the U.K., Australia and Canada, SRI is more common in the U.S., continental Europe and Japan.[24] In contrast, for others ethical investment remains closely associated with its original meaning, which is about the val-

[20] See Schwartz (2003, p. 202), McCann et al. (2003, p. 31)

[21] Ethical Investment Association (2006)

[22] Sparkes (2001, p. 195)

[23] See Cowton (1999), Sparkes (2001), Schwartz (2003), Hellsten, Mallin (2006, p. 393)

[24] See Cowton (1999, p. 60). According to Sakuma and Louche (2008, pp. 431-432) SRI is the preferred term in Japan to the extent that ethical investment has never been translated as the use of ethics is regarded as reserved for groups of intellectuals or those who have had a Christian education.

ues-based avoidance of certain corporate practices (see negative screening 2.3.1).[25] For them, SRI has instead evolved into an umbrella term that also encompasses modern forms of SRI, such as best in class or thematic investment.

The normative connotation of the term ethical investment has been an important contributory factor in the slow take-up of SRI in certain markets.[26] For example, the authors of a report by the Allan Consulting Group write that for many the term ethical investment involves some sort of moral 'high ground', which is likely to turn people off the message, which is why they suggest that SRI should be used rather than ethical investment. Furthermore, other critics of the term argue that so-called 'ethical exclusions' of companies on the basis of an investor's personal values may have little to do with ethics if it fails to rely on a refined ethical judgment or analysis by the investor. As a result, Anderson argues that "for the most part 'ethical' is another name for fashionable causes and a way of pre-empting complex moral arguments in favor of a particular foregone conclusion"[27]. Similarly, for Schwartz, the label ethical investment barely gives sufficient consideration to the underlying ethical dilemmas associated with some of these exclusions, in particular when conflicting ethical judgments exist.[28]

Today, other terms such as 'triple bottom line', 'sustainable investment', 'sustainable & responsible investment' or 'responsible investment' have also gained popularity. These terms have emerged to describe specific forms of SRI, which are about the integration of sustainability analysis into mainstream investment processes. Against this background, they have emerged in order to disassociate from earlier forms of SRI such as ethical investment and have also sometimes become silhouetted against SRI. In many cases it could be argued that they represent more of a repackaging of economically-oriented forms of SRI. Hagart and Knoepfel state that if a product is labeled 'ethical' or 'SRI', it will appeal only to a narrow range of investors. "If the positive financial characteristics of a product [...] are highlighted, then the potential range of interested clients increases"[29]. In the light of the great variety of terms and the inconsistency in their application among different market participants, in this thesis the term SRI is used, while being aware of the ongoing semantic debate and the fact that other terms such 'responsible' or 'sustainable & responsible investment' may eventually become the preferred terms in the future. In doing so, we follow the majority of practitioners in this field whose ongoing preference for SRI is mainly due to practicable and marketing reasons, as SRI is still the most acknowledged expression.[30]

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[25] See Sparkes (2001, p. 195)
[26] See The Allan Consulting Group (2000, p. 49), Signori (2009, p. 146)
[27] Anderson (1996)
[28] Schwartz (2003)
[29] Hagart, Knoepfel (2007)
[30] See Eurosif (2006, p. 1), Kinder (2007, p. 1)

2.3. SRI APPROACHES

Even though SRI is sometimes understood as a separate product category or asset class, it is ultimately a specific investment approach or process through which social, environmental, ethical or corporate governance criteria are taken into account in decisions over whether to acquire, hold, manage or dispose a particular investment.[31] Although many SRI products have historically focused on equity and bonds, the SRI logic could be applied to the entire range of asset classes including also real estate, private equity, alternative investments, or commodity investments.[32] To show this, the following section explores the different approaches and processes in more detail, distinguishing between negative and positive screening, ESG integration, shareholder engagement, community investing and social private equity (for an overview see Table 2).

TABLE 2 – OVERVIEW OF SRI APPROACHES

SRI approach		Definition	Climate change related examples
1) Negative screening / exclusion		Exclusion of firms, sectors or regions from the investment universe based on environmental, social, ethical or corporate governance related screens.	Investors exclude firms from polluting industries (e.g. oil & gas, mining) or particular firms that cause worst case environmental impacts.
2) Positive screening	a) Best in class	Selection of those firms within a sector that demonstrate leading practices with regard to environmental, social, ethical or corporate governance related criteria.	Investors select those firms that have an advanced climate change strategy, perform relatively well with respect to mitigation measures or have a low CO2 footprint.
	b) Thematic investment	Selection of firms that derive market opportunities from wider social or environmental challenges society faces.	Investors select firms that offer solutions or technologies to address impacts from climate change (e.g. providers of alternative energy).
3) ESG integration / integrated valuation		Integration of environmental, social, ethical or corporate governance information into the conventional valuation process of securities.	Investors identify positive and negative impacts from climate change and actively integrate this in the company valuation.
4) Shareholder engagement	a) Dialogue	Making use of ownership rights to enter into dialogue with a firm on environmental, social, ethical or corporate governance issues.	Shareholders directly engage with firms to promote reporting on climate change related risks and opportunities (e.g. through CDP).
	b) Proxy voting	Making use of ownership rights to vote at the general meeting on environmental, social, ethical or corporate governance-related proxy resolutions or issue own resolutions.	Shareholders publicly engage on climate change related issues with the objective of influencing corporate behavior (i.e. shareholder campaign over BP tar sands plans).
Community investment and social private equity		Provision of resources to environmentally or socially desirable economic activities (e.g. via micro-credit).	Investors engage in microfinance products that promote the provision of renewable energy to households.

Source: Own illustration

By reviewing these approaches, we will also show how SRI has grown and matured over time, in the sense that it has become more complex and diverse. In section 2.3.1 we start with negative screening that is considered to be the original form of SRI and which goes back to equity based ethical funds in the 1960s and 1970s that excluded companies in such sectors as arms, tobacco or alcohol. Such products were originally provided by a small number of specialist providers for mainly values-based investors such as charities or religious groups. In

[31] Cowton (1999, p. 60)

[32] For an overview of how SRI criteria are being integrated across all asset classes, see Boston College Center for Corporate Citizenship (2007).

section 2.3.2 and 2.3.3 we show how SRI has developed in an increasingly versatile and complex investment philosophy by including also positive strategies in which environmental, social, ethical and governance factors are taken into account to achieve long-term value creation. Consequently, such approaches have been adopted by a wider group of investors including mainstream investors such as pension funds. In addition to these portfolio screening techniques, section 2.3.4 looks at different forms of shareholder engagement which are primarily aimed at initiating structural changes among target firms by directly interacting with the firm. Finally, in section 2.3.5 we look into community investment and social private equity.

For all these different approaches, the development of mechanisms that inform potential or actual investors about environmental, social, ethical or corporate governance related factors is key.[33] In the following sections we therefore review these approaches in detail to better understand the processes of how issues are factored into either the investment decision or the engagement process. Based on this analysis, in section 2.5 we will then explore the effectiveness of these approaches in meeting specific objectives of investor to engage in SRI.[34]

2.3.1. Negative Screening

When examining the evolution of SRI, one has to start with early values-based or conviction-based concepts that were primarily aimed at aligning an investor's investment needs with their personal beliefs or values, normally resulting in the exclusion of companies, sectors or regions from the investment universe.[35] According to Kinder, until the 90s this form of negative screening was what was widely understood to be SRI.[36] In fact, the intention to align investment decisions with one's beliefs through avoidance is actually an ancient concept.[37] For example, forms of faith-based investing can be traced back to early Jewish doctrine as well as Christian and Moslem thinking[38] or practices by religious groups in the 18th century such as the Quakers or Methodists who refused to do business with firms involved in the slave trade, gambling or the production of tobacco and alcohol.[39] Other early examples date back to the beginning of the 20th century when the U.K. Methodist Church began investing in the stock market while avoiding companies involved in alcohol and gambling, or to the U.S. Pioneer Fund[40] established in 1928 that excluded companies involved in alcohol or tobacco. Yet the real shift towards modern-style negative screening was made only later, when the first ethical retail funds open to the public were established (see Table 3). In 1965, the first public ethical

[33] See Cullis, Lewis (1992)

[34] This includes concerns about the financial implications of these different approaches. These will be analyzed in more detail in chapter 2.4.3.2.3.

[35] See Dembinski et al. (2003, p. 206), Kinder (2007)

[36] See Kinder (2007, p. 23).

[37] See Brown (1998), Sparkes (2001), Bengtsson (2008, p. 970)

[38] See Schwartz et al. (2007, p. 139ff)

[39] See Schwartz (2003, p. 197), Statman (2005c, p. 14), Social Investment Forum (2008, p. 4)

[40] See Entine (2007, p. 175), Gabriel (2008, p. 30)

investment fund named Ansvar Aktiefond[41] was launched by the Temperance and Baptist movements in Sweden,[42] followed by two funds in the U.S., the Pax World Fund[43] launched in 1971 and the Dreyfus Third Century Fund launched in 1972. In the U.K., the first ethical fund, the Stewardship Trust was created in 1984 by Friends Provident[44] and according to the Quakers' pacifist traditions was designed to avoid companies involved in the arms trade. The launch of these ethical funds was also closely linked with other social, environmental or political movements for civil and women's rights and anti-war protests that emerged in the 60s and 70s and served to expand SRI to wider social concerns.[45]

TABLE 3 – EARLY EUROPEAN AND U.S. ETHICAL FUNDS

Country	Name of fund	Fund provider	Start year
Sweden	Ansvar Aktiefond Sverige	Aktie-Ansvar	1965
U.S.	Pax World Fund	Pax	1971
U.S.	Dreyfus Third Century Fund	Dreyfus	1972
U.K.	Stewardship Unit Trust	Friends Provident	1984
Scotland/U.K.	Ethical	Scottish Equitable	1989
Netherlands	Het Andere Beleggingsfonds	ABF	1990
Finland	Forum	Gyllenberg	1999
Spain	Fondo Etico	Morgan Stanley Dean Witer	1999

Source: Based on Kreander (2001)

To the extent that negative screening results in a narrowing of the investment universe, it has traditionally been more prominent among faith or values-based investors such as churches, charities, endowments, non-governmental organizations (NGO) or individuals that have the avoidance of certain unethical corporate practices as a primary objective, rather than long-term financial performance. For such ethically-motivated investors, negative screening has been an acceptable strategy to the extent that their ethical concerns are an integral part of their investment strategy. Conversely, this approach has been rather unpopular among the majority of conventional or mainstream institutional investors for whom negative screening runs against either their own investment rationale or in the case of pension funds, against the best interests of the beneficiaries (with 'best interests' typically referring to their best financial interests). Sethi affirmed that "conventional wisdom argues that the fiduciary responsibility of the pension funds' trustees must be solely focused on their beneficiaries and therefore their

[41] www.aktieansvar.se

[42] The fund took account of the core ethical values of the Temperance and the Baptist movements by excluding producers of alcohol, armaments, firearms and tobacco, see Kreander (2001, p. 13), Bengtsson (2008, p. 973).

[43] This fund still exists under the name Pax World Balanced Fund www.paxworld.com.

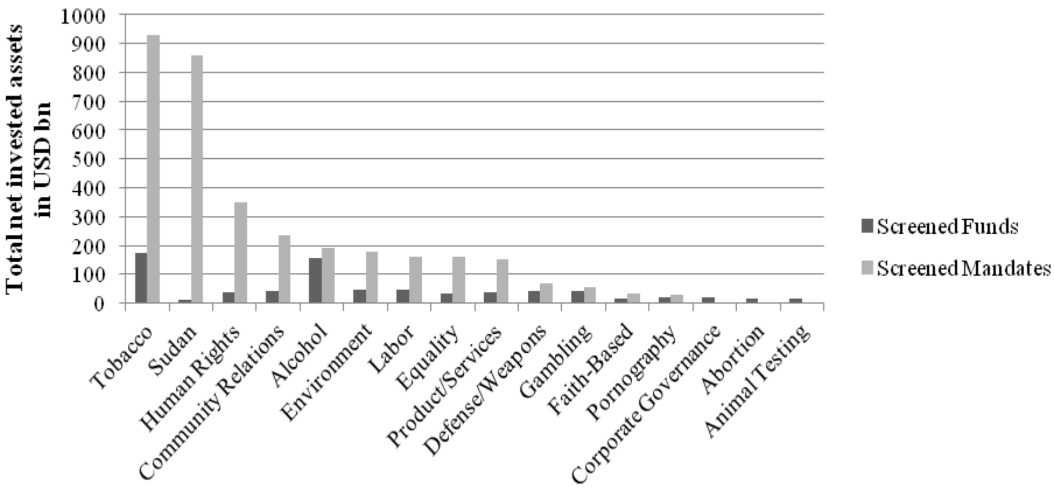
[44] Friends Provident (www.friendsprovident.co.uk) was founded in 1832 by Quakers to provide life insurance for its members. The name 'Stewardship' was inspired by a passage on the rightful use of money in the 'Parable of the Talents' in St. Matthew's Gospel (Matthew 25: 14-29), see Kreander (2001, p. 15).

[45] See Statman (2005c, p. 15), Bengtsson (2008, p. 970)

investment criteria must be based on narrowly defined financial measures."[46] For long this has been a major obstacle for mainstream investors such as pension funds to engage in SRI and has left SRI restricted to a rather small number of activist investors.[47]

Although the most common set of negative criteria typically includes policies against weapon manufacturing, tobacco or gambling, it could actually include a much wider range of things. In fact, evidence reveals considerable diversity with regard to the exclusions that have been applied over time, across regions as well as among different types of investors and products. For example, in the U.S. where negative screening is still the most preferred approach, tobacco is the most prominent screen for both SRI funds as well as screened mandates (see Figure 3). The antipathy of SRI investors to tobacco is also the case in other countries such as Australia and Canada.[48] In contrast, in Europe screens on arms and human rights rank first.[49]

FIGURE 3 – NEGATIVE SCREENS APPLIED TO MUTUAL FUNDS AND SCREENED MANDATES IN THE U.S.



Source: Social Investment Forum (2008, pp. 11, 19)

As shown in Figure 3, certain screens are more frequent in screened mandates (e.g. Sudan, human rights), while others play a more important role in pooled products (e.g. alcohol). This can partly be explained by the fact that screened mandates, which tend to be tailored to the needs of a specific investor (usually institutional investors or high net wealth individuals (HNWI)), can be adjusted more easily to current trends and preferences (e.g. Sudan divestment). In contrast, in the case of pooled vehicles, which gather the money of a large number of smaller investors, new restrictions are more difficult to introduce as they may shift the bal-

[46] Sethi (2005, p. 99)
[47] See Entine (2007, p. 175)
[48] See Social Investment Organization (2007, p. 10)
[49] Eurosif (2006, p. 7)

ance of a fund considerably and thereby eventually lead to inconsistencies with the values of a large number of clients.[50]

Since preferences for negative screens may also differ among client groups, asset managers have the opportunity to differentiate their offering in order to respond to specific client needs. For example in the U.S., the Calvert Group Mutual Fund translates investors' values into five restrictive screens, including the environment, workplace, product safety, international operations and human rights, and weapons contracting. In contrast, Citizens Funds breaks it down into ten restrictions, including the environment, equal opportunities, employee relations, community relations, human rights, nuclear power, alcohol and tobacco, weapons, gambling, and the treatment of animals. KLD Research & Analytics provides a set of restrictions that are grouped into three different categories: controversial business restrictions (company involvement in sectors of interest to social investors such as adult entertainment, alcohol, arms, gambling, military, nuclear power or tobacco), social issue restrictions (measure of CR performance with regard to the environment, human rights, union relations, employee safety, diversity, product safety, etc) and custom restrictions (including specialty areas such as animal welfare (e.g. animal testing or factory farming) or Islamic restrictions (e.g. pork or usury).[51]

TABLE 4 – COMPANIES SUBJECT TO CLUSTER MUNITIONS SCREEEN

Companies involved in the production of cluster munitions	Asset managers			Pension funds				
	Danske Bank	KLP Kapital-forvalt-ning	SNS Asset Man-agement	NGPF	AP1-4	NZSF	ABP	PGGM
Alliant Techsystems	☑	☑	☑	☑	☑	☑	☑	☑
Cobham	-	-	☑	-	-	☑	-	-
GenCorp	☑	☑	☑	-	☑	-	☑	☑
General Dynamics	☑	☑	☑	☑	☑	☑	☑	☑
Goodrich Corporation	-	-	☑	-	-	☑	☑	☑
Hanwha Corporation	☑	☑	☑	☑	☑	☑	☑	☑
Kaman Corporation	-	-	-	-	-	-	☑	☑
L-3 Communication	☑	☑	☑	☑	☑	☑	☑	☑
Lockhead Martin	☑	☑	☑	☑	☑	☑	☑	☑
Magellan Aerospace	-	-	-	-	-	-	☑	☑
Poongsan Corporation	☑	☑	☑	☑	☑	☑	☑	☑
Poongsan Holdings	-	☑	-	-	-	-	-	-
Rayethon	-	☑	☑	☑	☑	☑	☑	☑
Singapore Technologies	☑	☑	☑	☑	☑	☑	☑	☑
Textron	☑	☑	☑	☑	☑	☑	☑	☑

Source: Data retrieved from websites of the respective asset managers and asset owners

[50] See Social Investment Forum (2008, p. 19). The same holds also for the introduction of negative criteria in pooled pension fund portfolios.

[51] See KLD Research & Analytics (2008)

Finally, as shown in Table 4, even in cases where asset managers and asset owners apply the same screen (in this case, production of cluster munitions) they may end up excluding a different set of companies from their portfolio. This shows that even for a seemingly straightforward screen like cluster bombs there is considerable room for interpretation of how the screen is applied by investors.

2.3.2. Positive Screening

Contrary to negative screening, positive screening leads to investment in companies that perform relatively well with regard to certain environmental, social, ethical or corporate governance criteria while avoiding poor ones. Traditionally, positive screening consists of either a best in class approach or so-called thematic / pioneer investing. Typically such positive concepts are economically-oriented, in the sense that they assume that companies that perform relatively well with regard to these criteria will also perform well in financial terms in the long run. As a consequence, the emergence of these concepts during the late 1980s and 1990s was accompanied by a considerable broadening of the SRI investor base. While in the previous stage values-based investors dominated, at this point SRI became also an option for conventional or mainstream investors such as pension funds or insurance companies that lacked a mission-related commitment to ethical causes and which felt uncomfortable with the responsibility for moral or ethical judgments that decisions based on non-financial criteria imply.[52] According to Smith, this shift in the investor base is a direct consequence of the growing evidence that the behavior of companies with regard to environmental, social or ethical issues may well have a financial impact and hence may also involve opportunities for investors.[53] In this light, promoters of SRI argue that fiduciary investors such as pension fund trustees who are acting on behalf of others are not only legally permitted to consider environmental and social concerns, but are even required to factor such concerns into their investment and ownership decisions in the interest of their beneficiaries (see section 2.4.1).

2.3.2.1. Best in Class Selection

SRI products applying a best in class approach typically select those companies from a broad market index that demonstrate leading CR practices within their sector, thereby avoiding a priori exclusions of whole sectors from the investment universe.[54] As such, best in class products typically include large caps that have sufficient resources to run an advanced CR program. They tend to have an economic focus, as the underlying assumption is that a company's CR performance is positively related to its long-term financial performance through both potential equity premia and risk reduction (see section 2.5.3.2.1). As such, best in class selection

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[52] See Sparkes, Cowton (2004, p. §363), Caerlewy-Smith et al. (2006), Kinder (2007, p. 32), Bengtsson (2008)

[53] Smith (2005, p. 57), see also Schwartz (2003, p. 196)

[54] Hence companies chosen according to this approach tend to be large caps whereas smaller companies are often penalized because of their deficits in CR reporting and disclosure. As a result, best in class portfolios are generally not benchmarked against SRI specialist indexes but against conventional indexes (see Hudson (2006, p. 6)).

can be considered as a form of active portfolio management, where asset managers try to beat conventional market indexes by selecting those companies which perform best against environmental, social, ethical or governance criteria, assuming that such information is not sufficiently reflected in the share price.[55] In line with this growing demand for information, new research and rating organizations emerged that helped to increase the transparency of companies with regard to their CR performance.[56] Such organizations establish regular company ratings by tracking the firm's CR performance and use the information for either the construction of SRI indexes and / or corresponding investment products. For example, many SRI funds are licensed on the basis of such indexes indicating that the emergence of these actors was an important step in raising the general recognition of SRI as an investment area.[57]

The information gathering associated with best in class selection focuses on a number of important challenges. For example, due to the qualitative nature of many CR criteria, best in class analysis and selection is a more complex and resource intensive process than negative screening. First and foremost, this is because SRI analysts face the difficulty of evaluating a firm's CR performance consistently and calculating ratings based on both quantitative and qualitative criteria in order to reveal the best-positioned companies within a sector. In this regard Kinder writes: "today social investors also screen stocks on qualitative social criteria such as employee relations and corporate governance. These screens often require nuanced appraisals of corporate behavior. Whether a company has a "good employment record" rarely yields a quick yes or no. Reaching an answer for a large, complex company, such as DuPont, can take hours of analysis. In contrast, whether a company is in the gambling industry always produces a "yes" or a "no" answer, often in a matter of seconds."[58] Although the introduction of standardized reporting frameworks such as the Global Reporting Initiative (GRI) has partly increased comparability of company data, rating organizations still have to make a considerable effort to ensure the comparability and quality of the data which is drawn from different sources (e.g. company documents, media reports or through direct company interaction by questionnaires or interviews). Also, it has to be noted that the quality of such company data is often limited as the corporate self-assessment on which these ratings are based are rarely verified by independent sources and therefore in some cases may not be reliable. Especially in

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[55] The assumption is that certain risks or opportunities that relate to a company's responsibilities are completely overlooked by mainstream financial analysts causing the corresponding share price of a company not to be fairly valued by the market.

[56] See Schäfer (2005, p. 108). The first rating agencies involving mainly normatively oriented rating organizations were established in the U.S. to meet the needs of faith or mission-based institutional investors such as churches or charities, but also pension funds, see Schäfer et al. (2006, p. 156). For an overview of different corporate responsibility rating organizations see SustainAbility, Mistra (2004), Schäfer (2005) and Schäfer et al. (2006).

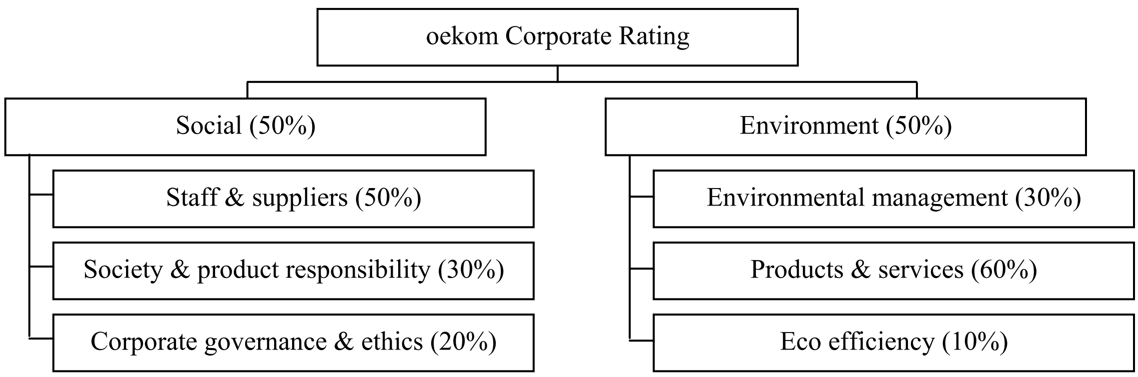
[57] For example Dow Jones Sustainability Index series (DJSI) launched in 1999 hold more than 70 licenses as of end 2009, accounting for USD 8 billion assets under management (www.sustainability-index.com).

[58] Kinder (2007, p. 27)

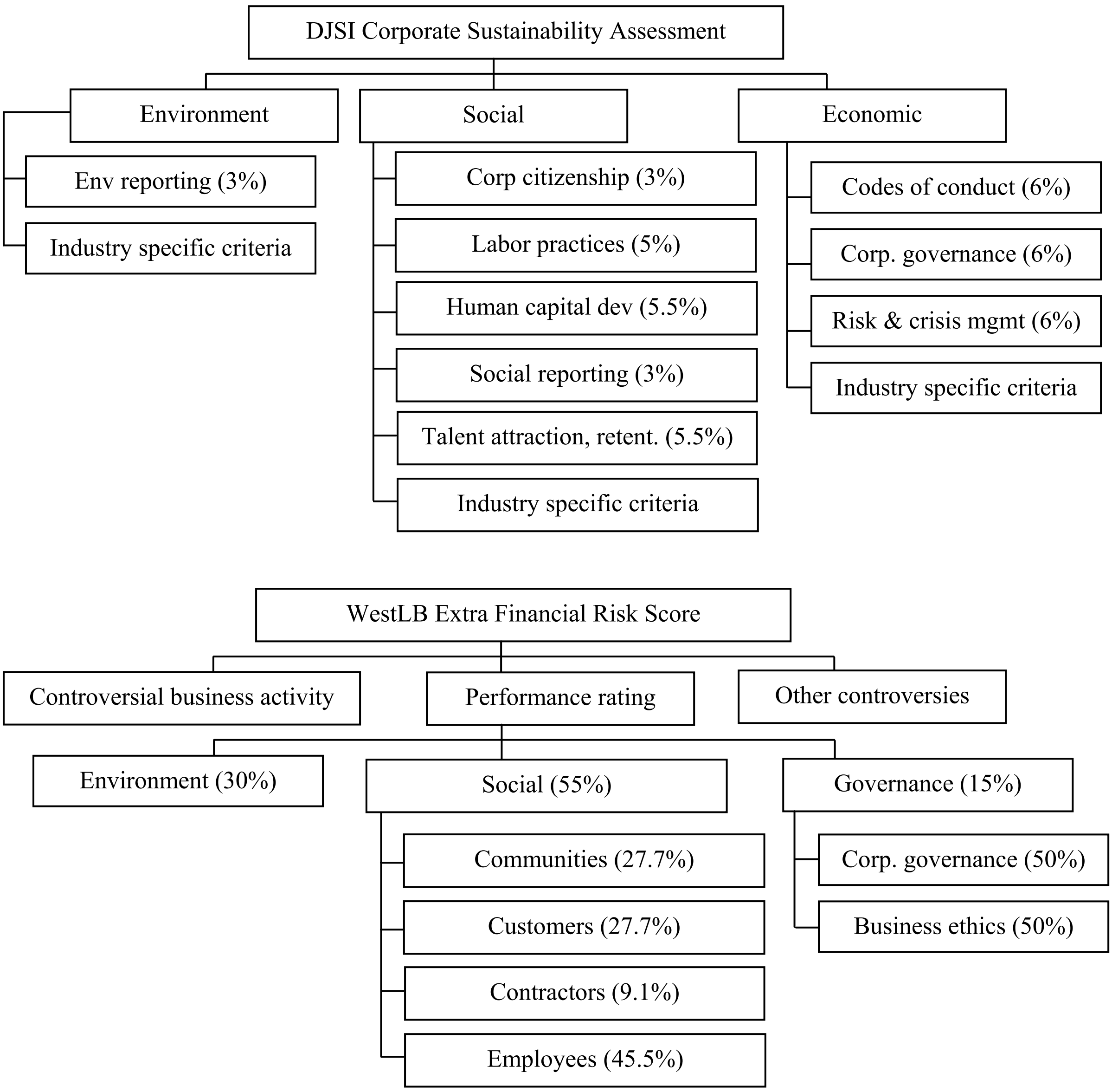
cases where companies use such ratings as a promotional tool this may lead them to overstate achievements while not disclosing controversial information.

An important challenge for best in class selection lies in the materiality check of CR activities for a given sector. Analysts must have a clear understanding of which CR activities are material and how they can be tracked and assessed in a reasonable way. According to the authors of the 2004 report "Values for Money", only a few research or rating organizations sufficiently analyze this relationship.[59] Instead, to simplify matters they often tend to use a company's CR performance as a proxy for good management, without having a clear understanding of the correlation between a company's CR and financial value drivers. To some extent this can be explained by the fact that the mechanisms of the relationship between CR and financial performance are still not well known or understood[60] and that contrary to conventional financial reporting there is no uniform reporting standard or methodology for the reporting of CR information. Quoting Schäfer et al.: "the body of knowledge about the causal relationships between individual [CR] criteria and their economic consequences seems to be still rudimentary, allowing concept providers sufficient latitude in developing their concepts (and presumably, for creating correlations that are real only in appearance)".[61] As a result, the rating methodologies as well as the proprietary scoring algorithms may differ considerably among providers of best in class products, indicating that there is neither agreement about what constitutes a responsible or sustainable company nor how this should best be measured. For example, the rating methodologies disclosed in Figure 4 are divided into different thematic categories (usually involving an environmental, a social as well as an economic or governance dimension), which are then further divided into different sub-sections. Each category and subsection is weighted according to the providers' proprietary scoring algorithm, reflecting the relevance attributed to rating criteria and serving the rating organizations as a means to differentiate their offering from their peers.

FIGURE 4 – STRUCTURE AND WEIGHTS OF DIFFERENT CR RATINGS



[59] See SustainAbility, Mistra (2004, p. 2)
[60] For an overview of these linkages see Rauschenberger (2001).
[61] Schäfer (2006, p. 162)



Source: DJSI (2009), oekom (2009), WestLB Research (2007)

2.3.2.2. Thematic Investing

Another form of positive selection concerns thematic or pioneer investing, which refers to the selection of companies of the future that derive market opportunities from the wider challenges society faces (e.g. companies that offer solutions or technologies to address climate change, water scarcity, ageing populations, infrastructure, clean technology, forestry, etc.). The first thematic products, labeled green or eco-efficiency funds, have already emerged in response to the debate around sustainability that was triggered by the publication of the Brundtland Sustainability Report in 1987. The focus of these early thematic products was primarily the promotion of eco-friendly and sustainable products and technologies to increase resource efficiency, the development of renewable energies and sustainable development in general.[62] According to Sparkes, the financial performance of these early thematic invest-

[62] Gabriel (2008, p. 30), see also Scholand (2004, p. 67), Bengtsson (2008, p. 973)

ments was not particularly good.[63] In retrospect, it appears that fund providers went through a learning phase in which they pursued a radical green stance rather than focusing on financial goals. In addition, their strong bias towards small and mid-cap companies (rather than large caps that have only a small proportion of their business exposed to a specific sustainability theme) caused thematic products to experience a relatively high level of volatility, which qualified them rather as satellite investments. Although their exposure to small and mid-caps persists, more recent forms of thematic investments are also financially sounder and match or even outperform conventional fund performances. Applying a top-down approach, today's thematic products focus on correctly identifying themes or behavioral or growth trends and then finding pioneering companies that promise also to be good investments. For example, Insight Investment, a U.K. based asset manager, writes that once they have identified a theme, they first assess whether this warrants an in-depth analysis by analyzing the impact of the theme on supply / demand balances, potential disruptions to existing markets and the scale of the opportunity or risk.[64] Where companies are identified as being beneficiaries of a theme they conduct initial screening to assess whether these companies are suitable investments for their products. If this is the case, conventional and SRI analysts undertake more detailed analysis to understand how the thematic driver might affect cash flows, returns and other financial measures of the company's success.[65]

For some, the resulting investment products qualify as SRI to the extent that they have sufficient exposure to sustainability related themes without involving (contrary to best in class products) an elaborate sustainability analysis at the company level. This means that potential investment targets would only need to have sufficient exposure to drivers identified for a specific theme (e.g. water). Products and services profiting from such a theme would typically need to constitute a significant percentage of the firm's sales or revenue. Again for others such as the European Social Investment Forum (Eurosif) or onValues, this would be insufficient to be labeled as SRI to the extent that thematic investments must truly take environmental, social and governance considerations into account by including sustainability screening in the construction process of the product (e.g. sustainable water).[66] Therefore, the products and services offered by companies included in a thematic SRI product should not only profit from a specific environmental or social challenge but also offer a sustainable solution. This does not mean that companies need to be best in class in all areas of sustainability (as many of the companies suited for thematic investing are small and mid-sized, such tight constraints would unnecessarily reduce the investment universe). However, in their view, companies need to comply with certain minimum requirements regarding their own environmental and social footprint. This means for example that a company in the biofuels sector should not only contribute to the reduction of CO_2 emissions, but also avoid causing disproportionate

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[63] Sparkes (2001, p. 200)

[64] See Insight Investment (2009b) and www.insightinvestment.com

[65] As such thematic investment overlaps with integration (see section 2.3.3).

[66] See Eurosif (2006, p. 12), onValues (2007)

environmental and social impacts otherwise (e.g. forest and peat land destruction, violation of the rights of indigenous peoples , impact on food prices, violation of labor rights).

In the Swiss market, thematic SRI fund products as well as structured products have played a key role in the growth of SRI[67] due to increasing awareness of both client advisors and clients to issues such as climate change and water. Strong performances in recent years coupled with an easy to understand research story (e.g. high energy prices and alternative energy, public and political attention and the creation of carbon markets through government regulations) has made such products attractive for retail and institutional clients alike. In return, the popularity of thematic investments has resulted in significant inflows of capital into corresponding products, thereby pushing up the valuations of these companies.[68]

2.3.3. ESG Integration

Increasingly terms such as integration, ESG integration[69] or integrated valuation are being used to describe a separate approach to SRI. For example, Vigeo defines integration as a form of SRI that is about the integration and management of pertinent extra-financial information into the mainstream analysis.[70] Similarly Eurosif considers integration as the explicit inclusion by asset managers of environmental, social and governance risks in traditional financial analysis[71], meaning that these criteria explicitly enter the valuation process of asset prices through their incorporation into the assessments of expected future cash flows. As such, integration differs from values-based forms of SRI in that its only purpose is to identify those aspects of a company's CR performance that are material to the operational and financial performance of companies and therefore it is free from a priori value judgments except, of course, those relating to financial value. Conceptually this may overlap with other economically oriented forms of SRI such as best in class selection or thematic investing. However, for Eurosif integration differs from these approaches to the extent that the consideration of material factors is not practiced in conjunction with any type of screening or selection as it is applied for example by providers of conventional SRI funds. Instead integration is practiced on "mainstream" or "traditional" assets and aggregated into an overall investment decision by becoming a mainstream component of financial instruments.[72] Another difference with regard to positive screening refers to the actors typically involved in the investment analysis and decision-making. Whereas for other SRI techniques, such as best in class or thematic investment, the analysis is usually conducted by specialist SRI teams focusing on certain product

[67] Eurosif (2006, p. 12)

[68] See Watson Wyatt (2008, p. 6)

[69] ESG is an acronym commonly used to represent 'environmental, social and corporate governance issues'. Socially responsible investing sometimes also refers to corporate governance issues (e.g. executive remuneration or separation between ownership and control) along with social, environmental or ethical issues as part of the broader group of extra financial issues (Eurosif, 2006).

[70] Vigeo (2006)

[71] Eurosif (2008, p. 13)

[72] See Eurosif (2008, p. 13), Wheelan in Responsible Investor (2009, p. 5), Robeco, Booz & Company (2008, p. 6)

and client segments with a high CR exposure, integration is an integral part of mainstream financial analysis involving all types of relevant business activities, regions, asset classes and client types.[73] An expression that is often heard in this context is 'mainstreaming', which refers to ESG factors becoming an integral part of mainstream or conventional financial analysis. This also means that SRI investments are no longer regarded as a separate category, but that ESG criteria are being applied to a large part of a client's portfolio encompassing all asset classes.[74] In fact, if all financial analysts consider material ESG factors in their analyses, many investment products currently labeled as SRI would become redundant, as these aspects would already be reflected in company valuation and hence also in portfolio construction.[75] Finally, another difference with regard to economically-oriented forms of positive screening has been raised by Viederman and is that whereas the methodology for positive screening is more retrospective, looking at the past performance of a company on social and environmental issues, ESG integration (although also using past data) emphasizes the capacity of a company to respond to future trends and developments (e.g. climate risk and opportunities).[76]

In this context a number of new and distinct initiatives have emerged, which are first and foremost aimed at improving the availability and quality of mostly qualitative ESG company information and which promote the integration of this information into standard company valuation models. The initiatives that need to be highlighted are the UNEP Finance Initiative (UNEP FI), the UN Principles for Responsible Investment (UNPRI) and the Enhanced Analytics Initiative (EAI). The UNEP FI[77], founded in 1991, is a global partnership between UNEP and the financial sector (including banks, insurers and fund managers) and served as a nucleus for the debate around ESG integration. Through its Asset Management Working Group (AMWG), the initiative substantially contributed to the understanding of the impact of ESG factors on the valuation of securities and the integration of these factors into investment analysis, decision-making and ownership practices. Out of the UNEP FI, and driven by concerns around fiduciary duties, in 2005 a group of primarily large institutional asset owners developed the UNPRI[78], a high level framework for institutional asset managers and owners to integrate ESG consideration into their mainstream investment practices. Since its foundation the UNPRI has attracted a considerable number of asset owners and asset managers, indicating the growing interest among mainstream institutional investors in this subject. Finally, confronted with an absence of high quality, long-term research on ESG issues, in 2004 the EAI[79] was founded in collaboration between leading asset owners and asset managers. To overcome this gap the initiative incentivized sell-side investment research to take a long-term

[73] See Who Cares Wins Initiative (2008, p. 16)
[74] See UNEP FI (2009, p. 67)
[75] See UBS (2007a)
[76] See Viederman (2009)
[77] See www.unepfi.org
[78] See www.UN PRI.org
[79] See www.enhanced-analytics.com

view and integrate material ESG by allocating five percent of their members' brokerage fees to those research houses that produce the best ESG related research. Thereby the EAI compensates for additional costs that the brokerage houses incur by conducting enhanced and more resource-intensive research on ESG issues. In order to further increase their impact, by the end of 2008, the EAI and the UNPRI joined forces under the PRI roof.

2.3.4. Shareholder Engagement

Shareholder engagement or activism can be defined as a SRI strategy that encompasses actions by investors who, in their awareness of social, environmental, ethical or corporate governance issues, exercise their shareholder rights to influence corporate practices. Thus, contrary to the approaches introduced above, which are about screening companies' CR performances to improve asset selection either in ethical or financial terms, shareholder engagement is aimed at improving a company's practices in either ethical or financial terms. Early value-based forms of shareholder engagement emerged in the U.S. in the late 70s and mid 80s among investors who expressed their opposition to the South African apartheid regime and the War in Vietnam.[80] Later, the underlying objectives of the activist shareholders shifted. As in the evolution of screening methods, conventional investors have also increasingly recognized shareholder engagement as an efficient mechanism for initiating structural changes with a view to creating a positive impact on the shareholder value of the targeted firm. Again this started in the U.S. with the activism of large institutional investors (e.g. public pension funds such as the California Public Employees' Retirement System (CalPERS)[81]), which have emerged as majority owners of many large corporations. For these investors, divestment from under-performing stocks was no longer an option due to their passive investment strategies or simply due to the sheer size of their positions, which rendered engagement more financially attractive than selling a disputed stock (see section 2.5.3.2.3).

One can distinguish different forms of shareholder engagement that involve varying levels of communication with a company, including conducting direct dialogue, exercising voting rights or filing or co-filing shareholder resolutions at the annual meeting. According to Ryan and Schneider, the form of engagement may vary depending on the underlying objective of the shareholder (either cooperative or confrontational). Normally, engagement efforts tend to start with dialogue behind the scenes with company management. If no agreement can be reached, shareholders may threaten to go public including proxy voting and issuing their own shareholder proposals accompanied by media campaigns. According to Ryan and Schneider such public forms of shareholder engagement should be considered hostile to the extent that they signal to the market that management is unwilling to respond to more cooperative negotiation attempts.[82]

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[80] See Grossman, Sharpe (1986), Malone, Goodin (1997), Monks, Minow (2001, p. 136)

[81] See Smith (1996) or Barber (2006) for an overview of CalPERS' shareholder activism.

[82] Ryan, Schneider (2002, p. 555).

Historically, shareholder engagement activities have focused on corporate governance issues and have mainly been practiced in the U.S. and the U.K. In other countries, such as Japan or in Switzerland they have played a minor role. Also, shareholder engagement on environmental or social issues has been less popular but has become more frequent recently.[83] Today, specialized providers of shareholder engagement services, as well as investor initiatives or coalitions such as the UNPRI engagement clearing-house have specialized in providing a forum for collective engagement on environmental or social issues. For example, since 2002, Insight Investment has engaged with companies on a wide range of social, environmental and ethical issues (see Table 5 for their 2007 engagement record). Three principal factors guide their selection of engagement topics: the materiality or business relevance of a particular theme or issue to companies or sectors in which Insight invests (i.e. the business case for shareholder engagement); the likelihood that the intervention will significantly affect a company's conduct or contribute constructively to an evolving debate and the seriousness of the environmental or social impacts at hand. The major themes on which Insight has engaged include climate change, consumer health and obesity, emerging technologies (e.g. nanotechnology), human rights, natural resource management, responsible supply chain management, revenue transparency and sustainable homes.

TABLE 5 – INSIGHT'S ENGAGEMENT RECORD ON ESG ISSUES IN 2007

Engagement issues	Frequency	Engagement issues	Frequency
Annual General Meetings	2	Doing business in difficult companies	24
Capital structure	14	Health and safety	1
Chairman meetings	54	Human rights	6
Directors' remuneration	65	New and emerging technologies	22
Take-overs	3	Principles for responsible investment	24
Access to medicines	1	Responsible alcohol retailing	9
Climate change	139	Supply chain issues	28
CR strategy, governance and reporting	38	Sustainable homes / next generation	26
Customer-related risks	30	**Total**	**486**

Source: Based on Insight Investment (2009)

2.3.5. Community Investment and Social Private Equity

Finally, community investment and social private equity is sometimes considered as another form of SRI investing, to the extent that it directs funds to socially or environmentally desirable activities (e.g. environment pioneers, micro-credit) that are otherwise under-served by traditional financial institutions.[84] Such products provide access to credit, equity, capital, and basic banking products that these communities or projects would otherwise lack. Hence, one could consider this form of SRI as a special type of positive screening, as they refer to the

[83] According to a report by U.K. based FairPensions (2008, p. 6) U.K. asset managers focus mainly on governance issues, whereas environmental and social issues play only a minor role. Among the 22 asset managers surveyed, 19 consider corporate governance issues, while only three (F&C, Insight and Standard Life) also address environmental and social issues.

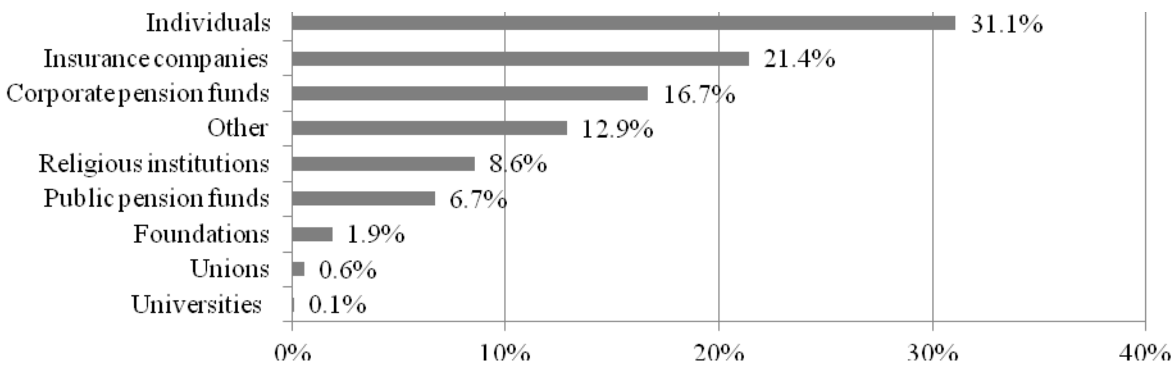
[84] See Munnell, Sundén (2004, p. 3)

application of environmental, social or ethical screens to non-traded assets. Community investment in principle differs from positive screening only with respect to the concrete asset class the screens are applied to. An important element of social private equity lies in the provision of both capital and management assistance to companies that create innovative solutions to social and environmental problems.[85] Whereas community investment plays only a minor role in Europe including Switzerland, it plays an important role in North America and is also increasingly considered as an integral part of SRI in Japan.[86]

2.4. SRI Investors Defined

Research in financial economics often treats investors with a high level of aggregation as a rather homogeneous group, particularly with regard to their interest in wealth-maximization. This sub-chapter reviews arguments that SRI investors not only differ from other investors in a number of ways, but also differ among themselves. In fact, as illustrated in Figure 5 which shows different types of investors engaging in the Canadian SRI market, SRI investors are a very diverse group of investors, whose entities may also have varying rationales and preferences for investing in a socially responsible manner (see also Figure 26 for an overview of institutional SRI investors dominating in Europe).

FIGURE 5 – CATEGORIES OF SRI INVESTORS IN CANADA



Source: Social Investment Organization (2007, p. 11)

In order to get a clearer picture of who is investing in SRI and why, in section 2.4.1, we first look at the disposition of individual and institutional investors towards SRI. As it becomes clear in this section, investors that engage in SRI may have either ethical or financial motivations or a combination of both. These underlying motivations will be subject to more detailed analysis in section 2.4.2. In section 2.4.3, we use the distinction between ethical and / or financial motivations to develop a proper typology of SRI investors by distinguishing between varying degrees of how ethical and financial considerations are combined in investment or ownership decisions. The general findings of this sub-chapter will later serve as a background to analyze the varying motivations of Swiss pension funds for SRI in section 6.1.1.1.

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85 See CCRS (2004)

86 See Sakuma, Louche (2008, p. 434)

2.4.1. Disposition of Institutional Investors Towards SRI

While the allocation of SRI IA varies across markets, typically institutional investors account for the lion's share and individual investors tend to play only a smaller role (see also Figure 24). This is surprising to the extent that individual investors are obviously less constrained than fiduciary investors when engaging in non-standard investment practices or when they integrate factors that seemingly run against traditional wealth maximization objectives. As a result private investors, but also foundations or family offices, are more likely to engage in traditional SRI practices, whereas pension funds are expected to engage more in shareholder value creation strategies (see section 3.2.1.4).[87]

Among institutional investors, which can basically be defined as organizations with substantial and mostly continuous investment needs and which pool and trade large volumes of securities[88], the question of whether they are allowed, permitted or legally required to engage in SRI is complex. To answer this question, institutional investors should be distinguished according to whether they invest their own assets in order to finance a long-term stream of discretionary spending (e.g. foundations or university endowments) or if they invest assets on behalf of their clients (e.g. pension funds which invest on behalf of their beneficiaries). The former, similarly to individual investors, are basically free to define the scope of their SRI engagement within the boundaries of their statutory requirements. Regarding the latter, in common law countries this question is usually addressed by making reference to general investment principles known as fiduciary obligations or duties, since the law rarely specifies whether they are legally permitted to invest in SRI on behalf of their beneficiaries. Overall fiduciary obligations may vary across different legal regimes[89], but in general entail a requirement for trustees to invest beneficiaries' assets prudently (prudent investor or prudent man rule) and in their best interest (duty of loyalty). With regard to the prudent man rule Yaron specifies that this principle generally requires fiduciaries "to exercise the care, skill, diligence and judgment that a prudent investor would exercise in dealing with the investments of another person. Existing judicial commentary has been read narrowly to require that pension trustees maximize returns on investment and maintain sufficient diversity within the pension plan's investment portfolio."[90] Regarding the duty of loyalty, the OECD writes that this

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[87] Instead of examining the characteristics and practices of individual SRI investors, in this thesis we focus on institutional investors and pension funds in particular. For an overview of demographic characteristics of private SRI investors see section 4.1.1.2.

[88] See OECD (2006, p. 159), UBS (2007b)

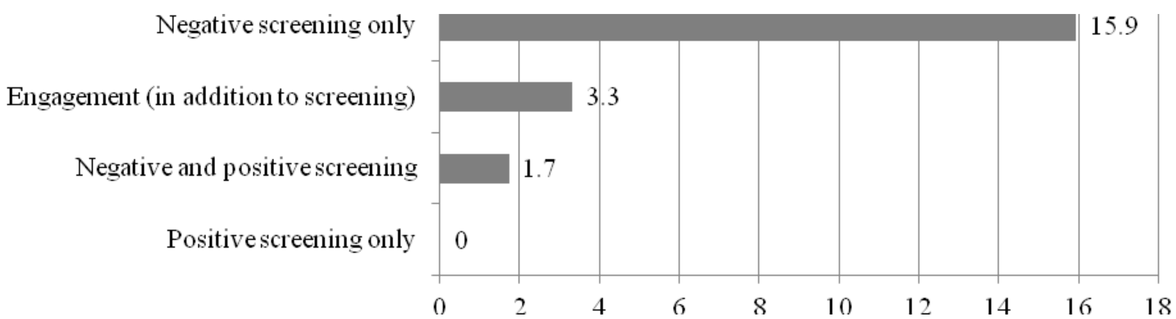
[89] According to Freshfields Bruckhaus Deringer (2005, p. 10) civil law jurisdictions do not recognize fiduciary duties as such. However, investment decision-makers in these jurisdictions are subject to obligations that in many circumstances give rise to equivalent duties.

[90] Yaron (2001, p. 5). The OECD defines the prudent man rule (2002a, p. 2) by the following broad principle: "A fiduciary must discharge his or her duties with the care, skill, prudence and diligence that a prudent person acting in a like capacity would use in the conduct of an enterprise of like character and aims".

principle "requires the trustee to administer the trust, pension plan or fund solely in the interest of the plan members, often expressed in terms of their "best" interest."[91]

As shown in the previous sections, different types of institutional investors have played specific roles during the evolution of SRI. For example, institutions such as charities, foundations, endowments, unions or churches (that invest their own assets in an attempt to ensure coherence with their organization's underlying purpose or mission) have played a key role in the early stage of SRI. In the 1970s and 1980s, the campaigns against the apartheid regime in South Africa or the Vietnam War were mostly driven by such organizations together with some concerned U.S. universities and public pension funds, which in an attempt to align their investments with their missions excluded companies involved in these conflicts. The strong preference for exclusion strategies by such investors is shown in Figure 6, which reflects the SRI behavior of some of the largest charities and foundations in the U.K. and for which exclusion is the preferred approach. In contrast, more conventional or rational investors, typically including also fiduciary investors such as pension funds, only started to systematically engage in SRI at a later stage. Actually, it was only with the emergence of more positive forms that this form of investing has gained greater attention among those investors, for whom the overriding investment principle is that an appropriate risk-return relationship must hold.

FIGURE 6 – U.K. CHARITY EQUITY HOLDINGS SUBJECT TO SRI (IN GBP BN)



Source: UKSIF in Eurosif (2003, p. 24)

Thus over the years, the disposition of fiduciary investors such as pension funds towards SRI has been interpreted in different ways. This is reflected in the question whether for pension fund SRI is restricted by law, voluntarily permitted or legally required by law. This question has been reviewed in detail by two well-known reports from the UNEP FI, commonly known as the 'Freshfields reports'.[92] The reports acknowledge that at an early stage, prior to the emergence of positive forms of SRI, this form of investment was generally considered to run against the principles of prudence and hence against the best interests of their beneficiaries.[93]

[91] OECD (2002a, p. 4). See section 4.1.3 on the varying interpretation of beneficiaries' best interest.
[92] See Freshfields Bruckhaus Deringer (2005), UNEP FI (2009)
[93] E.g. in 1980 Langbein and Posner (1980, p. 96) argued that SRI should be considered to be contrary to U.S. trust law and its statutory counterparts to the extent that trustees were sacrificing their benefi-

In particular, pension fund trustees expected this form of investing to limit investment choices and increase portfolio risks, while also imposing divestment or ongoing compliance costs that affect overall fund returns.[94] An important legal case contributing to this line of thought is Cowan v. Scargill (1984), which reviews the decision of a U.K. miners pension scheme not to invest in other energy providers or foreign companies. At that time, the court decided that the fiduciary duty of a trustee is solely to provide financial benefits for the beneficiaries and as such trustees should avoid making investment decisions on the basis of a trustee's personal or political beliefs. For a long time this decision was interpreted to say that non-financial considerations should not be considered by trustees.[95] Hence, with regard to SRI, Gold argued that this case was a "high water mark of a strict application of fiduciary principles restricting trustees from making investment decisions for moral or ethical reasons".[96] The two Freshfields reports argue that this restrictive interpretation of the application of SRI by pension funds has become obsolete with the growing evidence that SRI can indeed contribute to risk reduction and generate long-term financial value.[97] In fact, to the extent that pension trustees increasingly agree with this view, investing in SRI has no longer been considered to conflict with their duties and hence could be considered as a legally permitted form of investing.[98] In this regard a report conducted by Denmark's Pension Market Council considers SRI as being safe from a fiduciary point of view, stating "it is vital to ensure the legal requirement to get the highest possible return is met when ethical considerations are taken into account at the same time. Pension schemes that take ethical considerations in their investment behavior expect at least a return corresponding to the market."[99] Similarly, in a decision by the members from the U.K.'s House of Lords it was confirmed that pension funds are allowed to engage in SRI.

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ciary's financial well-being. By investing in SRI, trustees were argued to be in breach both of their duty of loyalty to their beneficiaries and their duty of prudence. See also Lanoff (1980, p. 391), Hutchinson, Cole (1980), Murrmann et al. (1984, p. 360).

[94] Sakuma and Louche report that trustees of Japanese pension funds are reticent to implement SRI strategies because of their fiduciary duties and concerns about the financial performance of SRI (2008, p. 436). Also, in the U.K. many pension fund trustees still believe that the current law does not allow them to consider ethical issues when making investments or divesting from a company purely on SRI grounds (see Henderson (2008)). See also Kolb (2007, p. xiii), Langbein, Posner (1980, p. 76), Yaron (2001, p. 5), Ryan, Schneider (2002, p. 560), Schumacher-Hummel (2004, pp. 285-287), Freshfields Bruckhaus Deringer (2005, p. 6). For example, in 2001, when the National Pension Reserve Fund (NPRF) in Ireland was established, it was decided that an ethical investment policy would not be appropriate or practical as it would constrain the fund's investments. Subsequently the NPRF was given a commercial investment mandate without an explicit ethical component (see Stewart (2009)).

[95] See Perks et al. (1992, p. 63), Yaron (2001, p. 1)

[96] See Gold (2007, p. 16). On the basis of the same line of argument the Canadian Business Corporations Act allowed companies to delete any shareowner resolutions that address social matters (see World Economic Forum (2005, p. 42)).

[97] In 2005 the authors of the Freshfields report (2005, p. 9) concluded that this case cannot be relied upon to support the single-minded pursuit of profit maximization, or indeed any general rule governing investment decision-making.

[98] See Yaron (2001), Freshfields Bruckhaus Deringer (2005), Richardson (2008), Sakuma, Louche (2008, p. 437), Taylor (2008), Martin (2009)

[99] See Fixsen (2007)

It has been acknowledged that "there is no reason in law why trustees cannot consider social and moral criteria in addition to their usual criteria of financial returns, security and diversification. This applies to the trustees of all pension schemes. Of course, disinvesting may not be the most appropriate approach for pension scheme trustees looking at the long-term sustainability of their investments."[100]

Today certain SRI proponents even argue that there is significant legal support to consider SRI as a requirement for institutional investors such as pension funds, as they will only be in a position to meet their fiduciary duties if related risk and opportunities are taken into account. Hence, trustees who do not factor these issues into their investment and ownership decisions may even be accused of breaching their fiduciary duties. For example, in 2005 the first Freshfields report concluded that institutional investors are obliged to consider ESG factors in assessing risk and return criteria when making their investment decisions.[101] Similarly, in the second Freshfields report in 2009 the authors considered the integration of ESG criteria as a legal responsibility for fiduciaries. They held that fiduciaries that do not incorporate ESG considerations into their services face "a very real risk that they will be sued for negligence".[102] Sethi argues that SRI is not merely a discretionary and desirable activity of pension funds but rather a necessary imperative "which both the corporations and public pension funds, and other large institutional holders, will ignore at serious peril to themselves".[103]

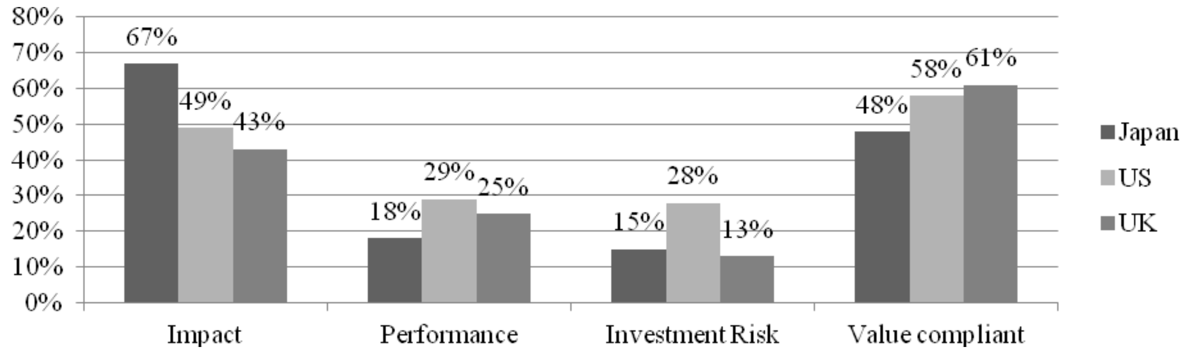
2.4.2. Rationales of SRI Investors

As the above section indicates, both individual and institutional SRI investors can be distinguished to the extent they take financial or ethical considerations into account in their decision to engage in SRI. The varying rationales of SRI investors should serve as important segmentation criteria for any SRI provider to offer products and services that effectively meet client needs. Traditionally, clients, particularly in the wealth management business, are classified on the basis of total IA[104], risk profiles (reflecting risk appetite and capacity), or demographic characteristics (see review of demographic characteristics related to the SRI behavior of individuals in section 4.1.1.2).[105] However, within an SRI context, there are severe limitations to using these criteria as the sole distinguishing features, without at the same time examining the underlying motivations of clients for SRI. To the extent that this is what makes SRI investors different from conventional investors, a question any financial client advisor should ask is whether potential SRI investors are interested in the financial performance of SRI in the

[100] See Henderson (2008)
[101] See Freshfields Bruckhaus Deringer (2005, p. 13)
[102] See UNEP FI (2009, p. 15)
[103] Sethi (2005, p. 99)
[104] See Rees (2008)
[105] For example, wealth managers tend to distinguish between retail or private banking clients in terms of their invested assets with implications for the types of services offered to clients due to profitability considerations (e.g. pooled vehicles such as mutual funds vs. tailor-made mandate solutions).

first place or if they invest also out of some ethical rationale.[106] Already in 1998, Beal et al. stated that there is a growing body of psychological, sociological research within the economic discipline itself which suggests that investors do not necessarily behave in the way that standard finance models of preferences typically suggest.[107] They argue that certain types of investors incorporate different types of non-financial goals or ethical concerns in their decision-making in addition to traditional financial motives (see Figure 7).

FIGURE 7 – RATIONALES OF SRI INVESTORS



Source: Environment Ministry Japan (2003)

As a consequence, Cullis and Lewis as well as Williams see a need for the adoption of a richer account of patterns of investor behavior than those provided by neo-classical economics, especially when explaining the behavior of investors who derive some sort of ethical utility from investing in SRI.[108] This reference to ethical utility draws an analogy with the ethical decision-making of consumers, who are inclined to pay a price premium for products that have environmental or social features.[109] For example, Statman writes that certain investors want more than low risk and high expected returns when they choose investments, eventually caring also about additional expressive benefits such as the social responsibility of their investments. As such, as in the case of ethical consumption, SRI offers self-signaling benefits in that it signals its social responsibility to an investor.[110] In contrast, Langbein and Posner draw an analogy with the owners of art in that SRI may confer a compensating utility. For them, despite historically lower rates of return for art investments than for their conventional benchmarks, the interest of individuals to invest in art indicates that they obtain some sort of extra consumption value from their investment, which when added to the investment return,

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[106] To the extent that there is often only limited transparency among the suppliers of SRI products with regard to these questions (e.g. marketing materials sometimes contain misleading information about the destination of these products, see section 2.5.2 on the misuse of the impact terminology), there is an opportunity for independent investment consultants especially within the institutional market to identify the best suited SRI offering (see role of investment consultants in section 4.1.4).

[107] See Beal, Goyen (1998), Dunfee (2003), Rivoli (2003), Beal et al. (2005), Butz, Pictet (2008) Petersen, Vredenburg (2009) Jessen (2009)

[108] See Cullis, Lewis (1992, p. 3), Williams (2007, p. 43)

[109] For an overview of the ethical consumer theory see Thaler (1980), Clark-Murphy, Soutar (2005), Freestone, McGoldrick (2008), Carter (2009)

[110] Statman (2004, p. 158)

equals or even exceeds conventional investment opportunities. Applying the same line of thinking to SRI, which was originally considered inferior in financial terms, Langbein and Posner conclude that this form of investing must also provide some sort of extra consumption value for investors.[111] Fama and French suggest that certain investors are interested in more than just pure financial wealth maximization and as such they may derive additional benefits or utility from holding SRI products. According to them, they may consider preference for SRI products as an "extreme form of tastes for assets as consumption goods that are unrelated to returns".[112] In the subsequent sections we will provide a more detailed overview of the different ethical and financial rationales of SRI investors. While pure forms certainly exist, most SRI investors probably find themselves somewhere in the middle; that is, they have mixed motives in looking for investments that achieve competitive returns while at the same time also providing a certain ethical performance.[113]

2.4.2.1. Two Conceptions of an Investor's Ethical Motivations

According to Kinder and Domini one can distinguish between two separate ethical perspectives underlying the ethical decision-making process of SRI investors. These correspond to two normative ethical systems of one's ethical obligations: deontological or teleological ethics.[114] The first deontological motivation of SRI investors addressed in section 2.4.2.1.1 is self-referential, arising out of a need for personal or institutional consistency. Hence investment decisions are judged to be ethical if they conform to certain values. In contrast, a teleological motivation, which corresponds to what Kinder and Domini call the 'comprehensive paradigm', is the investors' concept of how corporations should interact with society (see section 2.4.2.1.2) and hence the ethicality of investment decisions are judged upon their consequences or the impact they have.[115] Lewis and Mackenzie, who carried out a survey among clients of U.K. SRI providers, show that most clients combine both ethical systems (see Table 6).[116] The disposition of SRI investors towards these two ethical perspectives has important implications for providers of SRI products. As Cullis and Lewis indicate, a predominance of

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[111] Langbein, Posner (1980, p. 94)

[112] Fama, French (2007, p. 675)

[113] See Lewis (1999, p. 390), Dembinski, et al. (2003, p. 209) This has also been confirmed by onValues (2008, p. 11), who looked at the underlying rationales of individual SRI investors in Switzerland who have invested in thematic SRI products. The authors of the report note that for such investors 'altruistic' and financial motives are seen to be almost equally important and their SRI engagement tends to be driven by a combination of financial and 'altruistic' motives. They however argue that the picture would likely be very different if only the motives of institutional investors were assessed.

[114] Kinder, Domini (1997, p. 15). In line with this distinction by Kinder and Domini, Cullis and Lewis (1992, p. 9) distinguish between 'consumption investors', who gain utility from investing ethically, and, 'investment-investors', who gain utility from the social outcomes of their investments

[115] These two ethical perspectives have been reflected by the evolution of the exclusion policy of the Norwegian Global Pension Fund (NGPF), which in its original form tended to exclude companies where it deemed there was risk of complicity. In the beginning of 2010, the fund decided to relax its controversial exclusion policy in order to watch and lobby for change more effectively (see Wheelan (2010a)).

[116] Lewis, Mackenzie (2000a)

'deontological' driven SRI investors would suggest little interest in the actual effectiveness of SRI products to promote change. In return, SRI investors that are primarily driven by teleological motifs would deny real ethicality to SRI products that do not have an impact on corporate practices or contribute towards sustainable development at large.

TABLE 6 – ETHICAL RATIONALES OF SRI INVESTORS

Motives	Disagree strongly	Disagree slightly	In between	Agree slightly	Agree strongly	Don't know
(1) I want to avoid firms doing harm	0.8	0.4	1.5	9.6	83.9	3.8
(2) I want investments to be ethically clean	0.6	0.6	6.4	18.5	68.5	5.4
(3) I want my investments to help those firms which make a positive contribution to society	0.5	0.2	3.0	18.6	73.1	4.6
(4) I want money to be used to campaign for firms to change	2.9	6.3	20.7	31.2	31.2	7.7
(5) I don't mind if my investments are in firms which are doing bad things, so long as they are being used effectively to persuade the firm to get better	33.3	25.6	16.9	13.8	2.4	8.0

Source: Lewis and Mackenzie (2000b, p. 218)

2.4.2.1.1. Ensuring Compliance with own Values

A deontological view suggests that one should adhere to moral values in an investment decision and thereby act in a way that does not harm others. This kind of ethical motivation corresponds best to early values-based concepts of SRI which sought to align an investor's faith, ethical beliefs or values with his portfolio holdings, traditionally resulting in the exclusion of so-called vicious or sin stocks from the investment portfolio. Investors driven by such a rationale focus primarily on the rightness or wrongness of the investment decision itself, as opposed to the rightness or wrongness of the consequences of the investment. By extension, they want their investments to be in line with their subjective values and want to avoid being associated or being complicit with corporate practices judged as ethically condemnable. According to Schueth[117], such investors are sometimes also referred to as "feel good" investors, as they presumably feel better about themselves and their SRI engagement by deriving psychological income from their actions.

In order to make correct moral choices, such investors have to be explicit about their beliefs and understand which relevant ethical values regulate business activities and decide on the weight or threshold which a disapproved activity or practice can carry in a company without being excluded from the investment sphere.[118] A difficulty with this approach is that each

[117] Schueth (2003, p. 190)

[118] Dembinski et al. (2003, p. 205) distinguish between two types of arbiters to which an investor refers to in deciding about the rightness or wrongness of an investment decision: the investor's own conscience, moral values or convictions as rooted in the characteristics of the investor himself and dependent on his predispositions, as well as the statutory and institutional framework external to the investor.

individual investor is likely to have subjective ideas about what is right or wrong.[119] As such, one group of the SRI community may advocate investment policies that are pro-environment, anti-defense, anti-tobacco, anti-alcohol and pro-gay, while another segment of the community advocates religiously based investing promoting anti-contraceptive and anti-abortion / pro-life thinking.[120] Thus from a deontological perspective, it is ultimately the values-based reasoning system of the individual investor or group of beneficiaries that determines whether a certain corporate practice is right or wrong and not the objective investment properties or the impact of the investment itself. This involves considerable challenges for fiduciary investors such as pension funds, as the plurality of ethical values among their beneficiaries may turn into a considerable barrier when it comes to deriving a normative median position on a specific question on behalf of thousands of individuals.[121]

Another difficulty for deontologist investors may result from the objective of achieving full consistency between their values and their investments. A key challenge in this context refers to the question of where exactly to draw the line in order to remain in compliance with values. For example, an investor might exclude companies from the nuclear energy sector, while at the same time owning a conventional indexed fund including stocks from this sector. Alternatively, an investor may not hold an entire portfolio of SRI funds, but only a minority stake, while the rest of the portfolio is not managed according to the same underlying criteria.[122] Furthermore, a deontological investor will need to set a limit or threshold between what is considered as being complicit, and what is not (e.g. supplier of parts used by producers of cluster munitions). Hence for strictly deontologically motivated investors an assessment of costs is obviously not the right approach to determine the boundaries of his or her investment universe. Instead this must be based on careful and consistent moral reasoning which may eventually result in a considerable narrowing of the investment universe and hence cause a certain loss of diversification (see section 2.5.1).

2.4.2.1.2. Promoting Change / Having an Impact

Anecdotal evidence tells us that other SRI investors are more concerned to see a measurable or tangible impact from their investment or divestment decision. Investors motivated by such a view basically wish to catalyze positive change through their decision (e.g. to improve the CR performance of a company).[123] This can be aligned with teleological or consequentialist ethical theories that point out that the rightness or the moral worth of an action are determined by its consequences rather than by its underlying values.[124] Examples of investors acting this

[119] See Luther et al. (1992, p. 61)
[120] See Kolb (2007, p. 119)
[121] See Hagart in Grene (2008)
[122] See Dunfee (2003, p. 249)
[123] See Schueth (2003, p. 190). As Kinder (2004b, p. 8) recalls, "SRI emerged in the 1960s in North America, from two intertwined but distinct motivations: first it sprang from a desire to change the way corporations interacted with and affected society. […] Second, it arose from a desire among investors to ensure their investments were consistent with their ethics".
[124] See Cullis, Lewis (1992)

way include Sweden's AP government buffer funds (AP1-4) whose responsible investment strategy, apart from generating financial return for its beneficiaries, focuses on driving positive change in companies associated with violations of international conventions. For this purpose, the funds actively engage with companies that have indicated shortcomings with regard to a variety of environmental or social issues.[125]

In order to make correct ethical choices, such investors need to have a clear understanding of the consequences of the allocation of capital. Since their motivation is to promote change, the question whether they are acting responsibly ultimately depends upon the effectiveness and (cost-benefit) efficiency of an investment to promote change. When they make choices which result in the correct consequences, then they are acting responsibly.[126] As will be shown in more detail in section 2.5.2, SRI investors driven by such a rationale have different options. For example depending on the size of the investor or investor coalition they may either avoid bad companies or explicitly embrace good corporate practices as such strategies may eventually create the necessary reputation effects to promote change among their target. Alternatively, investors may also donate to organizations such as NGOs that monitor corporate behavior[127], invest in pioneering companies or finally, influence firms through different channels of engagement (e.g. public campaigns or by making active use of their rights as shareholders). Critics of a teleological perspective argue that it is generally difficult to measure the effective impact of SRI on a company or even on society or to balance possible consequences of investing in a socially responsible manner as few choices are unequivocally positive.

2.4.2.2. Financial Motivations: Risk / Return Considerations

Since the early 1960s, classical finance theory considers investors as rational economic actors who maximize risk-adjusted financial returns over a given time horizon.[128] This implies that according to the classic mean-variance analysis of Markowitz the prototypical model of a rational economic investor cares only about the expected return and risk of their investments and aims at an efficient portfolio.[129] In line with this theory, Baker and Haslem show in a study of decision variables used by individual investors that investment decisions typically result from an investor's expectations about dividends and future returns as well as the firm's financial stability.[130] Similarly, in a survey conducted among 500 shareholders, Nagy and Obenberger found that the most important criteria underlying investment decisions include classical wealth-maximization criteria, such as expected earnings, diversification needs and

[125] See Ethical Council (2008, p. 2). The engagement activities in 2007 have focused on issues such as the right of employees to sign collective agreements and the adoption of a policy on freedom of association, child labor prevention, adoption of and reporting on compliance with human rights policies, improvement in environmental work and greater transparency and guidelines for transactions.

[126] See Dembinski et al. (2003, p. 207)

[127] See Guay et al. (2004)

[128] See Williams (2007, p. 43)

[129] Markowitz (1952)

[130] Baker, Haslem (1974)

minimization of risk.[131] Hence it could be argued that for these investors criteria such as a firm's environmental track record or ethical reputation play only a role to the extent that they affect the risk and expected return of their investment.[132] Quoting Beal et al., "if investors actually behave as traditional finance theory assumes, [SRI] would exist only because it provides the opportunity for equivalent return at lower risk or provides higher returns for the same level of risk as standard funds"[133].

In fact, various authors argue that institutional investors consider responsible companies as being less risky than companies with a lower CR performance, as in the latter case additional risks may emerge from changing regulatory frameworks, consumer boycotts, etc.[134] Hence, for Spicer, investing in a company that is irresponsible could be inefficient compared to a responsible company which achieves the same return with a lower level of risk.[135] Furthermore, contributing to the solution of social and environmental problems may also open business opportunities for proactive companies and generate profits for investors, while ignoring these problems could pose risks to profits. Thus, ultimately, rational economic investors may end up having a strong incentive to promote higher levels of CR performance by investing in SRI. This line of thinking may fit two types of SRI investors. First, investors alarmed by the potential costs of certain unsustainable corporate practices or attracted by fast-growing environmental technology industries may consider environmental, social or ethical criteria as selection criteria, but not as the motivation itself.[136] According to Dembinski et al. such SRI investors attach no ethical significance to the act of investing in itself, but assume that companies who respect a certain number of ethical values have a stronger probability of obtaining better economic performance than those less strict in this respect (see rational economic investors described in section 2.4.3.1).[137] Second, this disposition also applies to more conscious SRI investors that are concerned about harmful corporate practices and that may use financial markets as a means to promote ethical values and higher levels of CR to the extent that it positively impacts shareholder value. They value CR behavior even if at the end of the day they are unwilling to sacrifice financial returns to achieve it (see shareholder value focused investors described in section 2.4.3.2.3).[138] As shown in section 2.5.3, both types of SRI investors have different options to engage in SRI.

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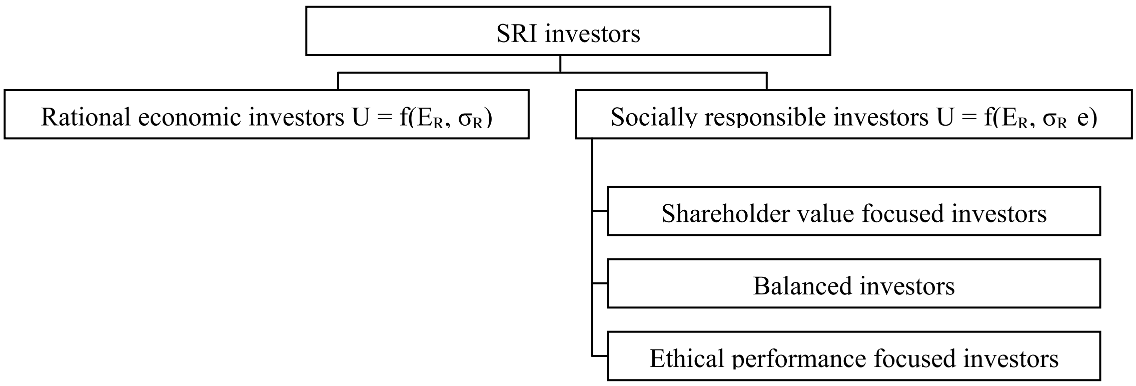
[131] Nagy, Obenberger (1994, p. 64)
[132] See Nagy, Obenberger (1994, p. 64), Statman (2005a, p. 33), Petersen, Vredenburg (2009)
[133] Beal et al. (2005, p. 67)
[134] See Spicer (1978), Graves, Waddock (1994), Cox et al. (2004), Petersen, Vredenburg (2009).
[135] Spicer (1978, p. 96)
[136] See Dembinski et al. (2003, p. 208)
[137] Dembinski et al. (2003, pp. 208-209)
[138] See Rosen et al. (1991, p. 221)

2.4.3. Typology of SRI Investors

As proposed within the previous sections, the assumption that investors care only about the financial aspects of their investment is not tenable in reality. In response, different authors propose adapting the standard utility function of investor behavior by explicitly inserting an ethical performance dimension to reflect the ethical attributes derived from a socially responsible investment decision.[139] Using such an 'enhanced' utility function, SRI investors could be classified based on how they combine profit-making and social responsibility (see Figure 8). A first distinction is between 'rational economic investors'[140] that have a standard utility function ($U = f(E_R, \sigma_R)$) and that engage in SRI for purely financial reasons while being indifferent about the ethical aspects of their investments (see section 2.4.3.1), and conscious 'socially responsible investors' that have an enhanced utility function ($U = f(E_R, \sigma_R, e)$)[141] and whose rationale to engage in SRI results from a combination of financial and ethical returns (see section 2.4.3.2).

FIGURE 8 – TYPOLOGY OF SRI INVESTORS



Source: Own illustration

2.4.3.1. Rational Economic SRI Investors

Rational economic investors, who judge SRI exclusively against financial measures while being indifferent about the impact of corporate practices, do not derive any ethical utility from engaging in SRI. Thus, this group of SRI investors considers SRI only to the extent that they are instrumental in the pursuit of their financial objectives. According to Dembinski et al., environmental, social or ethical concerns represent only a selection criterion for the investment portfolio, but not the motivation that inspires the investor's actions.[142] As a consequence, such investors attach no ethical significance to the act of investing itself, but assume that companies that respect a certain number of ethical values have a strong probability of obtaining better economic performance than those less strict in this respect. Hence, they favor companies that respect certain values, because this increases the likelihood of reducing

[139] See Tippet (2001, p. 171), Beal, Goyen (2005, pp. 73-75), Butz, Pictet (2008, p. 24), Jessen (2009).
[140] Butz and Pictet (2008, p. 8) denote such investors as 'SRI materialists'.
[141] See Beal et al. (2005, p. 73)
[142] Dembinski et al. (2003, p. 208)

risk levels or improving financial returns.[143] Applying this distinction, the term 'SRI investor' only implies the choice of a distinct financial product or adhesion to a set of criteria bearing a certain label, but does not provide any information about the responsibility or the degree of ethicality of an investor. In this context Dembinski et al. emphasize that the exercise of responsibility by an investor cannot be reduced solely to the recourse to a particular investment method, or a particular financial product bearing an ‘ethical’ or ‘responsible’ label.[144] Therefore, rational economic investors investing in SRI should not be called ‘socially responsible’ or ‘ethical’ investors.

2.4.3.2. Socially Responsible Investors

In contrast, socially responsible investors or ethical investors are supposed to be truly concerned about harmful corporate practices and the impact business may have on society and derive extra utility from investing in an ethical manner. As shown in Figure 8, such investors can further be classified into three sub-types depending on their varying disposition to trade off financial return against ethical performance.[145] First, ethical performance focused investors are primarily interested in the ethical performance of their investment and are not interested in the return or risk characteristics. Second, balanced investors are willing to make trade-offs between financial and ethical performance but not at any cost. To a limited extent they engage in SRI, even if this may be sub-optimal in terms of risk-adjusted returns, since higher levels of ethical performance compensate for financial losses. Finally shareholder value focused SRI investors, although interested in financial as well as ethical aspects of their investments, are unwilling to make such financial trade-offs.[146]

A number of studies have tried to track these trade-offs.[147] Although different in their methodology and scope, they broadly confirm a limited willingness of the majority of SRI investors to bear financial losses, which suggests a predominance of shareholder value focused SRI investors and attributes only a niche role to investors focused primarily on ethical performance.[148] According to these studies, in most cases their ethical commitment remains highly price-elastic, causing SRI investors to reduce their investment rapidly as comparative returns fall.[149] For example, Rosen et al. found that SRI investors would be willing to forego some amount of return on their investment to support social causes, but generally expect SRI to pay off as well as any other type of investment.[150] Similarly, Sparkes showed that while 35% of

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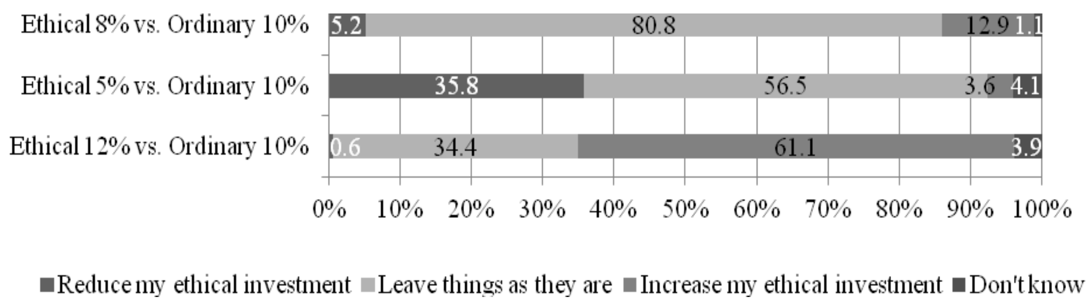
[143] Dembinski et al., (2003, pp. 208-209)
[144] Dembinski et al. (2003, p. 205)
[145] See similar typology used by Beal, Goyen (2005, p. 74), Tippet (2001, p. 171), UNEP FI (2007)
[146] Cullis, Lewis (1992, p. 6)
[147] See Rosen et al. (1991), Sparkes (1998), Lewis, Mackenzie (2000a), Statman (2005a).
[148] The predominance of shareholder value focused SRI investors may vary across markets depending on the existence of mission-based investors (e.g. mission-based investors such as charities play a more important role in the U.K. than in other European countries). Also there may be cultural differences, which make individual investors more ready to trade financial against ethical performance.
[149] See Webley et al. (2001)
[150] Rosen et al. (1991)

respondents would invest ethically if returns were slightly lower than for comparable conventional funds, this percentage drops rapidly if the return is significantly lower than for conventional investments.[151] This also corresponds to the findings of Lewis and Mackenzie, who showed that a majority of investors stay with SRI when the return is 8% for an SRI product compared with 10% for a conventional investment product. In the case where comparative figures are 5% and 10%, the loyalty of SRI investors substantially declines, with 35.8% of SRI investors reducing their SRI holdings (see Figure 9).[152]

FIGURE 9 – WILLINGNESS TO ACCEPT REDUCED FINANCIAL RETURNS TO INVEST ETHICALLY



Source: Lewis and Mackenzie (2000a, p. 184)

2.4.3.2.1. Ethical Performance Focused Investors / Ethical Investors

Ethical performance focused investors are primarily focused on the ethical performance of their investment and give precedence to ethical over financial considerations following a lexicographic ordering of their preferences.[153] A more restrictive definition has been provided by Beal and Goyen, who write that this type of investor is eventually completely uninterested in the return or risk aspects of their investments and as such the return and risk components from their utility function could be removed as they attempt to maximize the ethicality of their investments subject to any income or budgetary constraints.[154] While their description of ethical performance focused investors may apply only for very specific groups of SRI investors (e.g. NGO activists holding minimum shares to run a campaign at a general meeting), a wider interpretation may also hold for faith or mission-based organizations, such as churches, foundations, charities NGOs or individuals whose investment decision should complement rather than counter personal or organizational values and who may view SRI as a form of charitable

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[151] Sparkes (1998) in McLachlan, Gardner, (2004, p. 12)

[152] Lewis, Mackenzie (2000a, p. 184)

[153] By lexicographic ordering of investor preferences we mean that investors prefer the fulfillment of certain normative values over financial returns. This can be explained by the existence of certain normative precepts (e.g. the respect of human rights) that are seen by individuals as of great moral significance for their personal conduct and consistency. As a result, they become integrated with actors' economic preferences. In cases when there is a conflict between the financial interest and the fulfillment of such a moral norm, the investor opts for the latter, even at a cost to material well being.

[154] Beal, Goyen (2005, pp. 73-75)

donation.[155] As such they permit only limited trade-offs between their ethical concerns and financial profitability and are willing to sacrifice or place less emphasis on financial return in their investment decision than other groups of socially responsible investors. According to McLachlan and Gardner this "is something that may well be present in a small number of hardcore socially responsible investors with stringent principles, but may not be so prevalent among less committed socially responsible investors who are willing to apply their principles more loosely."[156] Assuming that there is a priori no limit to the expenses one can incur when an investment needs to correspond to the investor's moral concerns, ethical performance focused investors that follow a strictly ethical objective might risk a considerable part of their financial resources in the pursuit of their ethical objectives. Hence for conventional investors such as pension funds, which have a legal obligation to meet certain financial objectives, this profile is inadequate.

2.4.3.2.2. BALANCED INVESTORS / ETHICALLY MINDED INVESTORS

Balanced investors are ready to trade-off financial and ethical performances against one another. As such, they will accept a loss in financial performance for the sake of a higher ethical performance in some circumstances, but unlike ethical investors, they will not stand by their values at any cost. Beal et al. classify investors that want to achieve close to a market rate of return with the additional feel-good factor from the ethical investor label as 'consumption investors'.[157] They do not run the same moral dilemmas as 'ethical-performance-focused' investors, since their investment decision is also based on financial and not primarily on moral considerations. However fiduciary investors such as pension funds applying this run into another dilemma as their propensity to trade off a certain amount of financial performance against ethical goals risks the violation of their fiduciary duties. Although pension funds may have room for maneuver, such a strategy may turn out more practicable for those funds which have made this view an explicit part of their statutory framework (e.g. union or church pension funds or collective funds with open memberships).

2.4.3.2.3. SHAREHOLDER VALUE FOCUSED INVESTORS / QUASI ETHICAL INVESTORS

Shareholder value focused investors give clear precedence to the objective of financial performance over ethical considerations. As such they follow a reverse lexicographic ordering to ethical performance focused investors. They are unwilling to trade off financial return against the ethical value of their investment, which is why Cullis and Lewis label them "quasi ethical" investors.[158] Similarly to rational economic investors they expect SRI to have returns which match other types of investments and therefore seek to identify social and environmental criteria which may affect financial performance and therefore corporate share price or shareholder value. They differ from rational economic investors to the extent that they receive additional utility from investing in a socially responsible manner. A key implication of their

[155] See Rosen et al. (1991, p. 230)
[156] McLachlan, Gardner (2004, p. 20)
[157] Beal et al. (2005, p. 72)
[158] Cullis, Lewis (1992, p. 6)

unwillingness to sacrifice financial returns against ethical goals is that companies providing SRI products should be aware that such investors will not accept lower returns on their investment in exchange for social responsibility.[159] This probably applies to most pension funds interested in SRI, because, they are restricted in trading off financial value for ethical performance, while at the same time their beneficiaries may welcome any extra ethical benefits derived from investing their retirement capital in line with responsible investment standards. The AP1-4 are examples of pension funds reflecting this view. In 2001, the funds were assigned to invest their pension capital to achieve the maximum benefit and generate a high long-term return at a low level of risk. The funds have the mandate to take account of the environment and ethics, but without compromising the overall goal of a high return.[160]

2.5. Effectiveness of SRI Strategies

After clarifying what motivates investors who engage in SRI, a follow-up question to be addressed is to what extent a specific SRI strategy is effective in meeting these underlying objectives. To answer this, in the following sections we assess the capacity of different SRI techniques to meet the investment objectives introduced in the previous sections. Whereas the effectiveness of different SRI techniques in guaranteeing non-complicity can be assessed using simple logic (see section 2.5.1), assessing the capacity of SRI techniques to influence corporate behavior is conceptually more complex and has not been the subject of many studies (see section 2.5.2). Finally, the financial attractiveness of different SRI techniques can be derived from financial theory and by reference to empirical research (see section 2.5.3).

2.5.1. Avoiding the Risk of Complicity

As defined in section 2.4.2.1.1, a deontologically motivated SRI investor engages in SRI with the objective of avoiding being complicit in corporate behavior deemed unethical (i.e. to remain ‘ethically clean’[161]). The effectiveness of SRI techniques in guaranteeing non-complicity can be assessed using simple logic as such investors should primarily avoid holding shares of companies engaged in activities that are considered problematic. Hence, the effectiveness of exclusions or negative screening is relatively straightforward depending on the scope of the restrictions applied. A major challenge regarding such exclusion criteria is to define the boundaries of the exclusion to retain a certain consistency in its application. For example, often such exclusions apply a threshold (e.g. 5 or 10% or more) to focus only on those companies that derive a certain percentage of their revenues from disputed businesses. Also, providers of such exclusionary screens have to define whether it is limited only to the company producing a product or service on which the screen applies directly (e.g. alcoholic beverages) or if it should also include other companies involved with the production of a good (e.g. suppliers that derive a certain revenue from the manufacture of products necessary for the production of the problematic good, or financial intermediaries involved in the financing of a

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159 See Rosen et al. (1991, p. 231)

160 See Ethical Council (2008, p. 2)

161 See Lewis, Mackenzie (2000b, p. 220)

target company through an initial public offering or project finance). In this light, Simon et al. consider it to be hopelessly naive to ensure complete consistency of values, as the interconnectedness of the corporate sector involves the investor in an endless series of arbitrary decisions.[162] Certainly, investors that invest through tailor-made mandates are in a better position to define at their own discretion the scope of their exclusions in order to meet a certain predefined level of non-complicity. Ultimately, for them it is a matter of financial interest or level of economic rationality whether they seek to avoid completely any involvement in a certain activity. In contrast investors investing in standardized pooled SRI products have less flexibility and risk being invested in companies that they would not consider consistent with their values.[163] Furthermore, passively indexed investors that often hold a broad share of a market have clear limits in applying negative screening as an effective mechanism to ensure value consistency.

Positive approaches towards SRI are less effective in avoiding complicity as they provide non-complicity in relative terms as the screens usually apply to the overall CR performance of a company, rather than to specific behaviors or issues. They therefore allow only for trade-offs between different CR issues.[164] For example, products applying a best-in-class approach usually also include investments in leading companies that, although having the smallest impact or footprint in a given sector[165], are part of industries that are considered unsustainable or unethical (e.g. oil, arms, alcohol, tobacco or nuclear) and that many people would intuitively exclude from a SRI portfolio. As a result, often best in class products also combine exclusion criteria for certain sectors in order to avoid the worst performing industries. Thematic investing and integration are not effective in guaranteeing non-complicity, since both approaches allow SRI investors to invest in companies that eventually perform badly in terms of certain CR issues but which are financially attractive. This can be a serious limitation, as investors motivated to ensure non-complicity tend to display preferences for overall high levels of CR. Since engagement, by definition, requires the investor to dispose of rights inherent in investment and ownership, the goal of non-complicity cannot be achieved. Finally, the effectiveness of social private equity and community investment to ensure non-complicity with certain unethical practices follows the effectiveness of the screening method applied.

2.5.2. Promoting Change / Having an Impact

As shown in section 2.4.2.1.2, impact driven SRI investors prefer "moral effectiveness to moral purity"[166]. As such, they gain utility from the outcome of their investment and therefore are primarily interested in the consequences or the societal impact caused by their investments. Investors guided by such a rationale should carefully choose SRI strategies that have

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[162] Simon in Sparkes and Cowton (2004, p. §239ff)

[163] Although Kempf and Osthoff (2008) showed that SRI funds have a higher ethical ranking than conventional funds.

[164] See CCRS (2004)

[165] See Koellner (2007)

[166] See Simon in Sparkes, Cowton (2004, p. 4)

the capacity to influence companies to improve their CR performance or to promote a better societal outcome.[167] Whereas the analysis of the effectiveness of different SRI strategies to ensure non-complicity has been relatively straightforward, assessing the capacity of SRI strategies to influence corporate practices for higher levels of CR or contribute to society at large is more complex and has not yet been the subject of many studies. In fact it is relatively difficult to check SRI products on their 'social responsibility' as measurable 'social benefits' of SRI strategies tend to be rather vague and the impact of SRI on corporate behavior or sustainable development is hardly ever made evident, nor is it credibly reported on. Nevertheless, providers of SRI products and services regularly use this 'impact-terminology' in their marketing materials[168] to make potential investors believe that by investing in SRI they will make a difference by either punishing companies that act irresponsibly or promoting those that act in a responsible manner. According to Entine, advocates of SRI referring to this 'impact-terminology' have yet to prove the case that their techniques can effectively promote change.[169] In the following sections we focus on the effectiveness of the different SRI techniques in generating significant changes in either target companies (see section 2.5.2.1) or by contributing to socially responsible objectives in general (see section 2.5.2.2).

2.5.2.1. Exerting Pressure on Companies

SRI Investors may be interested in exerting pressure on companies that pollute or overexploit natural resources, violate human rights or undermine social institutions. In theory, they have two ways to demand higher levels of CR: either through the possible impact of their investment decisions on the asset price via the buying or selling of assets (see section 2.5.2.1.1) or through directly acting on management by the use of their ownership rights (see section 2.5.2.1.2). In the following sections we will review these two channels in more detail with the objective being to determine which approach is more effective.

2.5.2.1.1. Through Screening

In the first section we focus on the question of whether investors can influence corporate behavior through their investment decisions alone.[170] For this purpose, we will assess, by referring to standard finance theory, whether the buying or selling of an asset has an impact on the asset price either through the change in demand (see section 2.5.2.1.1.1) or through the generation and dispersion of new information about the fundamental value of the stock (see section 2.5.2.1.1.2). We presuppose that changing asset prices (together with possible reputation

[167] Pension funds, which have emerged as one of the largest sources of equity capital in many countries, are considered to play a key role in this regard. Through their large holdings in many companies, they are seen, at least in principle, to have the potential to exert sufficient influence through their investments.

[168] See Haigh, Hazelton (2004, p. 69), Hellsten, Mallin (2006, p. 394)

[169] Entine (2007, p. 182)

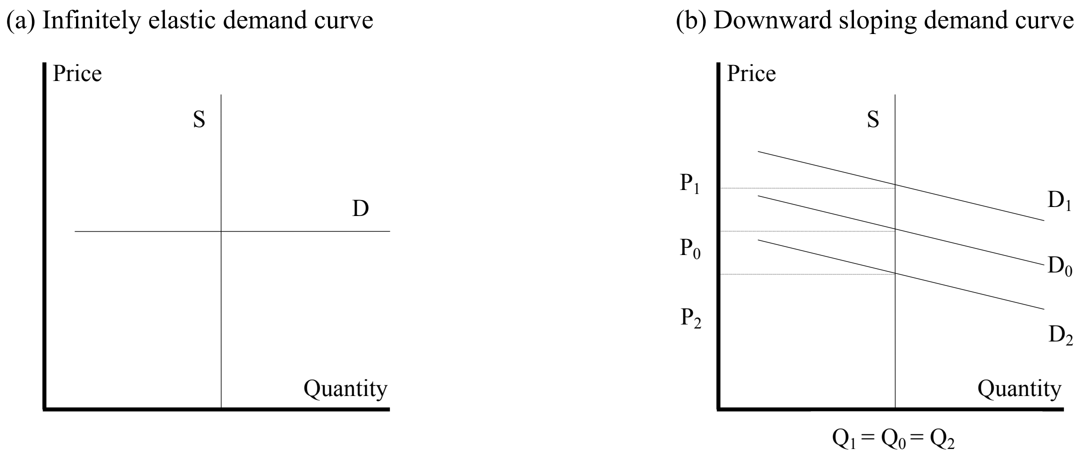
[170] Strictly speaking we are exploring whether it is possible to create incentives for companies to improve through the sole announcement of an investment decision as, in the case of negative screening, once the shares are sold investors are left with no influence.

effects) resulting from sale or purchase decisions may influence corporate behavior either through an effect on executive remuneration packages[171] or through impact on cost of capital.

2.5.2.1.1.1. Demand for Corporate Stock

According to standard textbooks in finance, due to perfect substitution of a company's stocks, the demand for stocks is considered as being infinitely elastic as illustrated by the horizontal demand curve in Figure 10 (a). In such a situation the efficient market hypothesis suggests that the price of a stock is not determined by demand, but by its fundamental or inherent value, which equals the present discounted value of expected future cash flows.[172] Hence, a change in demand for a company's stock resulting from buying or selling would not affect the relative price of the asset due to the dynamics of arbitrage. Accordingly any investment or divestment based on SRI screening would not have an impact on the price of the stock and would consequently prove inadequate to influence corporate behavior.[173] This is because any selling or buying pressure that causes the price to deviate from its fundamental value represents a profitable trading opportunity that indifferent market participants would immediately arbitrage on.[174] Hence, the inclusion or exclusion of companies will simply end up in a reallocation of asset ownership between SRI investors and indifferent investors without any lasting effect on the share price.[175]

FIGURE 10 – SUPPLY AND DEMAND OF A GIVEN COMPANY'S STOCK (1)



Source: Based on Munnell and Sundén (2004, p. 9)

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[171] Depending on the structure of their compensation packages corporate managers generally have a relatively straightforward incentive to increase the value of the stock (i.e. via stock options, performance-based pay, etc.). In cases where buying and selling of the company's assets could impact the price of the asset, corporate managers have an interest in maximizing the demand for their stock. In such a situation they have an incentive to respond to shareholder expectations promoting CR because failing to do so risks negatively impacting the company's share price and hence affecting their remuneration packages (see Petersen, Vredenburg (2009, p. 1)).

[172] Shleifer (1986, p. 579)

[173] See Sparkes, Cowton (2004, p. 10), Johnsen (2003)

[174] See Rudd (1981, pp. 57-58), Munnell, Sundén (2004, p. 8)

[175] Munnell, Sundén (2004, p. 14)

The above argument however assumes that there is a liquid market situation where there is always a marginal investor to benefit from arbitrage and to purchase the stock at its present value.[176] Evidence however suggests that demand curves for corporate stocks are somewhat downward sloping, as illustrated in Figure 10 (b) and hence due to limited arbitrage, shifts in demand for a given stock may have an impact on the price of the stock. For example, Shleifer showed that the inclusion of companies in an index such as the Standard & Poor's 500, although not conveying any new information about changes in the fundamental value of the company, has the capacity to affect a company's share price as fund managers automatically purchase such stocks to track the index. To the extent that the inclusion in an index does not contain any new information about the fundamental value of the stock, changes in stock prices can only be explained by a shift in the downward sloping demand curve.[177] It can be argued that the more arbitrage is limited, the lower the price elasticity of the demand for an individual asset (i.e. the more the demand curves slopes down) and the more the argument that shifts in demand for assets can affect asset prices becomes plausible. Accordingly, the key question for analyzing the effectiveness of screening methods is how effective arbitrage can be expected to be on the market segment where the screening is applied. In this context, critics still consider the SRI movement as being too marginal to create any lasting effect on the share price of firms since the demand curve is very elastic even if not perfectly elastic.[178] In fact, some rare event studies (see Table 7) showed that there is no effect in this direction. Other authors, although not testing it empirically, expect screening to have an impact on a company's share price in cases where larger investors or a powerful investor coalition simultaneously screen a certain stock from their portfolios[179] and / or in cases where the liquidity of the market is severely restricted (i.e. private equity, micro-credit or possibly small capitalization stocks).[180]

TABLE 7 – ARTICLES EXAMINING THE IMPACT OF ASSET SELECTION ON ASSET PRICES

#	Authors	Title of study	Subject of analysis	Finding
1	Teoh, Welch, Wazzan (1999)	The effect of socially activist investment policies on the financial markets: evidence from the South African boycott	Effects of a divestment campaign by companies doing business in South Africa	No price effect
2	Di Bartolomeo (2000)	A view of tobacco divestiture by CalSTRS	Effects of the divestiture of tobacco stocks by CalSTRS	No price effect

Source: Own illustration based on Mercer (2009)

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176 See Maug (1998, p. 66), Statman (2000, p. 36), Müller (2002, p. 29), Rivoli (2003).

177 Shleifer (1986), see also Scholes, (1972, p. 182), Statman (2000, p. 36). Similar price effects could also occur in cases where companies are included or excluded from major SRI indexes such as the DJSI or the FTSE4good. To the extent that many SRI products are licensed on the basis of these indexes, it is fair to assume that a company's listing in such indices automatically attracts additional demand from SRI investors. However, in this case it is difficult to determine whether the resulting price effects are a consequence of the change in the demand or the result of the information about the firm's CR performance.

178 See Statman (2000, p. 36).

179 See Rudd (1981, p. 57), Perks et al. (1992, p. 44), Webster in Lewis, Mackenzie (2000b, p. 216), Gay, Klaassen (2004, p. 3), Munnell, Sundén (2004, p. 14), Hong, Kacperczyk (2009, p. 2)

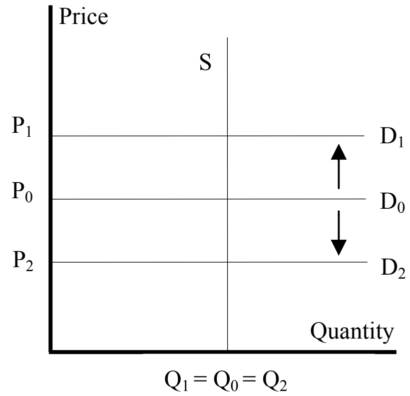
180 See Maug (1998, p. 66)

2.5.2.1.1.2. Information about the Fundamental Value of the Asset

Another channel to influence asset prices through screening refers to changes in market information about the fundamental or intrinsic value of the asset that result from an investor's decision to buy or sell. According to Fama, in an efficient market security prices always fully reflect all available information and instantly change to reflect new information.[181] Hence, according to theory, it is impossible to systematically beat the market (i.e. purchase undervalued stocks or sell stocks for inflated prices) on the basis of existing information. Fama distinguishes between three subsets of the efficient market hypothesis. The weak form asserts that all past market prices and data are fully reflected in the price of securities.[182] The semi-strong form asserts that all publicly available information is fully reflected in the asset prices. Under this assumption, fundamental analysis is of no use in earning excess returns. However, according to Mackey et al. this does not mean that the value of a stock always equals its fundamental value, as there may be a great deal of insider information about the value of the asset.[183] Finally, the strong form asserts that all information (including insider information) is reflected in the price of a stock. As for other forms of active investments, the weak-form efficiency is a necessary condition for positive forms of SRI including ESG integration to exist.

FIGURE 11 – SUPPLY AND DEMAND OF A GIVEN COMPANY'S STOCK (2)

New information under efficient market conditions (i.e. infinitely elastic demand)



Source: Based on Munnell and Sundén (2004, p. 9)

As shown in the previous section, if arbitrage functions perfectly asset prices can change only as a result of the receipt of new information (see Figure 11). Hence a second channel to impact the price of a corporate stock through either negative or positive screening refers to its capacity to generate and diffuse new information, which is indicative of a mispricing gap between the fundamental values of assets and their prices. For example, the publication of either negative or positive CR information through rating agencies or analysts that evaluate the CR

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[181] Fama (1970, p. 383)

[182] As for other forms of active investing, the weak form of the efficient-market hypothesis is a necessary condition for integrated valuation of ESG factors. In contrast, in a situation of semi-strong-form market efficiency, where asset prices adjust instantaneously to all new publicly available information, fundamental analysis on ESG factors would not be able to systematically produce excess returns.

[183] See Mackey et al. (2007, p. 820)

performance of firms may well trigger negative or positive stock market reactions. In cases where SRI indexes such as the FTSE4Good index series or the Dow Jones Sustainability Index (DJSI) series select or deselect companies on the basis of an analysis of a variety of CR criteria, being a constituent of such indexes signals a sound CR performance to the market (i.e. a proxy for good management) whereas dropping out of the index could be interpreted negatively.[184] In principle, such information can lead the demand curve to shift as shown in Figure 11, since new information may become incorporated by investors into their valuation of an asset's future free cash flows and / or financial risk.[185] Thus, rating agencies, data providers and / or analysts may have an impact on a company's share price to the extent that they generate, process and diffuse raw ESG information which, contrary to conventional financial data, is often of only limited quality and comparability and whose accessibility is often restricted due to the lack of quality research and tools. The valuation or ESG integration of such information by investors can, at least in principle, be seen to contribute to the generation and diffusion of new information, even when at the end of the day they have not directly produced the information themselves. The effectiveness of this approach to influence prices then depends on the size of the SRI movement that factors such information in their stock valuation.

In contrast, simple exclusions of companies based upon existing information about the identity of the market in which the company operates (e.g. exclusion of an arms manufacturer) conveys essentially nothing new about the fundamental value of the respective assets. This holds also for positive assets selected from an existing investment universe incorporating only companies that perform relatively well on some (arbitrarily) weighted CR benchmark. Assuming that in both situations all of these criteria are public information, the sole decision by an investor to screen a company's stock against these criteria will not generate any new information about the fundamental value of the assets and hence will not have the capacity to influence share prices.[186] However, it could be argued that in certain cases screening decisions may still serve as a means to influence the management of a firm mainly for larger institutional investors when they signal their discontent (satisfaction) about certain corporate practices thereby causing public awareness and reputation risks for the business under consideration.[187] According to Shleifer, in cases where major asset owners offer to sell (buy) a large

[184] See Sparkes, Cowton (2004, p. 5), Ziegler (2009, p. 7). According to Adam and Shavit (2008, p. 901) these ratings do not provide incentives to firms excluded from the SRI indices to invest in CSR. Curran and Moran (2007) show t
having the expected effects on daily returns. These movements are not significant however and the data do not suggest that a firm's presence on the index brings it any significant financial return for signaling its CR practices.

[185] Integrated valuation of ESG factors, by its very definition (see section 2.3.3), is about integrating ESG information into the estimated value of companies. This may include ESG information such as a company's CO_2 footprint, human rights controversies, employee churn rates, etc. which may impact the company's fundamental value (i.e. through various channels such as enhanced resource competitiveness, litigation costs, employee motivation, customer boycotts, emerging government regulation (i.e. global market for CO2) or fines), see Cox et al. (2004, p. 29).

[186] Schepers, Sethi (2003, p. 26)

[187] See Shleifer (1986, p. 579), Schwartz (2003, p. 209)

block of assets for whatever reason, this may suffice to signal bad (good) news about the stock (i.e. presuming insider information[188]), eventually resulting in a price decrease (increase).[189] For example, given the huge size of the Norwegian Government Pension Fund (NGPF) with about USD 400 billion IA as of 2010, Clark and Monk conclude that the process of 'naming and shaming' by the fund can make headlines around the world.[190] Such actions may eventually create similar reputation effects, as in the case of well-orchestrated consumer boycotts and create pressure among the management to change their practices. Depending on the nature of the company, the management of a firm may have a higher propensity to respond to this sort of negative publicity. Anecdotal evidence of this comes from by Jeanett Bergan, a SRI adviser at KLP who reported that a company that excluded by KLP contacted the firm to ask what they could actively do to improve the situation and possibly reverse the exclusion.[191]

2.5.2.1.2. Through Shareholder Engagement

As defined in section 2.3.4, shareholder engagement refers to investors exercising the rights inherent in investment and ownership to directly influence the management of a firm. Whereas mechanisms to influence companies through asset selection seem less obvious and unlikely to be effective in most cases, shareholder engagement via equity ownership represents a relatively straightforward approach.[192] As a starting point, investors have to hold shares in companies that give them the right (or the responsibility in cases where a fiduciary has to maximize shareholder value for its beneficiaries) to raise concerns with the company's management or the board.[193] They can do so through different channels involving varying levels of communication. These channels may range from discussions behind closed doors, to more public forms of interaction such as exercising voting rights or filing or co-filing of shareholder resolutions at the firm's annual shareholder meeting.

It is generally difficult to evaluate the success of different forms of shareholder engagement, as there is only limited transparency on their impact and also no clearly defined criteria of success. In many cases the effectiveness of shareholder engagement cannot be assessed simply because investors prefer to conduct informal discussions behind closed doors rather than publicly filing shareholder resolutions.[194] Changes in corporate behavior can also rarely be attributed to a single engagement effort, as shareholder engagement by an investor is often part of a wider campaign also including actions by other stakeholders.[195] Related to that com-

[188] The market may perceive institutional investors as possessing more information than individual investors. According to Munnell and Sundén (2004, p. 9), "if potential purchasers believe that the seller is disposing of the stock because he knows something adverse they do not, they will revise down their assessment of the stock's value, and the transaction will reduce the price of the stock."
[189] Shleifer (1986, p. 579), see also Haigh, Hazelton (2004, p. 64)
[190] See Clark, Monk (2009, p. 2)
[191] See Stewart (2008)
[192] See Lewis, Mackenzie (2000b), Gay, Klaassen (2004, p. 3)
[193] See Smith (2005, p. 58)
[194] See Logsdon, Van Buren (2009, p. 354)
[195] See Sparkes, Cowton (2004, p. §581ff), Tkac (2006, p. 13), Rojas et al. (2009)

panies also barely disclose or admit that changes were due to pressure from external stakeholders in order to avoid creating a precedent. Possible criteria of success can be measured when shareholder proposals receive a high ratio of votes or if management takes the action requested.[196] However, such criteria have clear limits. As Tkac shows, there is no clear-cut relationship between the vote percentage and the likelihood of subsequent corporate action in the U.S. as companies are not bound to implement a shareholder proposal even if it receives a majority vote. Also if the management of a company does not change its policies or practices this does not mean that the engagement effort by the shareholders had no impact.[197] According to Proffitt and Spicer, in cases where no immediate effects can be observed or where shareholder proposals have been withdrawn[198] this does not mean that engagement has been unsuccessful, as the result from these activities may only become discernible over years or even decades.[199] Such seemingly unsuccessful engagement activities may serve as a catalyst for an evolution of expectations and thereby provide the foundation for future change.

TABLE 8 – ARTICLES ON THE CAPACITY OF SHAREHOLDER ENGAGEMENT TO IMPACT MANAGEMENT

#	Authors	Title of study	Subject of analysis	Measure of success	Finding
1	Smith (1996)	Shareholder activism by institutional investors: evidence from CalPERS	Governance focused shareholder activism by CalPERS from 1987 - 1993	Success rate of achieving desired changes in governance structures	Effectiveness depends upon type of resolution. Takeover-related resolutions have lower success rates than performance-related resolutions
2	Del Guercio, Hawkins (1999)	The motivation and impact of pension fund activism	Governance focused shareholder proposals filed by pension funds in the U.S. from 1987 - 1993	If managers of firms make significant changes in policies or if proposal mobilizes support for further governance activity	Pension funds are more successful at promoting change in target firms than previously recognized
3	Tkac (2006)	One proxy at a time: pursuing social change through shareholder proposals	US social shareholder proposals from 1992 - 2002	Final disposition of the proposals and if the firm meets the requests for action	The total impact is difficult to measure but is probably larger than the estimates suggest
4	Klein, Zur (2006)	Entrepreneurial shareholder activism: hedge funds and other private investors	Shareholder proposals in U.S. publicly traded firms, filed from 2003 - 2005	If management acquiesces to demands as articulated in the initial proposal	High success rate
5	Rojas et al. (2009)	Bringing about changes to corporate social policy through shareholder activism	US social shareholder proposals from 1997 - 2004	n.s.	Shareholder proposals have limited but not negligible capacity to change corporate policies and practices

Source: Own illustration based on Mercer (2009), non-exhaustive list

[196] Del Guercio, Hawkins (1999, p. 307)

[197] See Sparkes, Cowton (2004, p. 7), Tkac (2006, p. 14)

[198] Rojas et al. (2009, pp. 9-10) show that proposals can be withdrawn by shareholders for a number of reasons (e.g. due to limited anticipated support or due to concessions preemptively offered by the management to avoid voting on a resolution).

[199] See Proffitt, Spicer (2006) in Rojas et al. (2009, p. 2)

Despite the difficulties in measuring the impact of shareholder engagement, there is some evidence that in the past engagement on governance, environmental or social issues has been effective in terms of promoting change among target firms (see Table 8). In particular, these studies suggest that the growth of active ownership on specific issues had an impact on managers' perception about the relevance of these concerns.[200] To the extent that SRI IA have grown considerably in the past and awareness among corporate executives for the materiality of CR issues has increased[201], the ability of SRI investors to directly act on companies or even instruct corporate executives as majority owners has grown. In this regard Sparkes and Cowton write that executives "take notice of their most powerful investors, and if those investors are embracing SRI in some way, social issues will inevitably find a significant place on the corporate agenda." Rivoli writes that "in general, shareholder support for social policy resolutions has been too small to garner a voting majority, but too large for management to ignore".[202]

2.5.2.1.2.1. Determinants of the Effectiveness of Shareholder Engagement

Various factors may enhance the effectiveness of shareholder engagement. In addition to characteristics inherent to the target firm (e.g. brand value, responsiveness of management with regard to CR issues, ownership structure) or the quality of the shareholder rights attributed by the legal regime, there are also different factors inherent to the engagement process or the activist shareholder which determine whether an engagement strategy is ultimately successful or not. An apparently important prerequisite for success is that shareholders dispose of a sufficient holding of the respective company's assets in order to attract the attention of the company and to back-up the legitimacy of their request.[203] This assumes that shareholders owning a large fraction of the outstanding shares of a firm are better positioned to exercise pressure on management to promote change than investors with a smaller share.[204] Sparkes and Cowton state that it has been the growth in pension assets in the past that has endowed pension funds with the power to request, and if necessary instruct, corporate executives to take account of environmental, social and corporate governance aspects.[205] Especially in the U.S., where pension funds reportedly jointly own over 50% of all public equity[206], shareholder engagement has been associated with prominent activist pension funds such as

[200] See Rivoli (2003, p. 274), Sparkes, Cowton (2004). According to Rivoli (2003, p. 274), since the mid-1990s, approximately 250 to 300 shareholder resolutions related to social/ethical issues have been introduced by shareholders each year [in the U.S.].

[201] See Bielak et al. (2007). In a survey conducted by Accenture (2010) among 750 CEOs of companies that are signatories of the UN Global Compact, 96% of the CEOs believe that sustainability issues should be fully integrated into the strategy and operations of a company. This figure increased from 72% in 2007.

[202] Rivoli (2003, p. 275)

[203] See Davis, Steil (2001, p. 22). According to Tkac (2006, p. 14), in the U.S. there is no relationship between the vote percentage and the likelihood of subsequent corporate action as corporations in the U.S. are not bound to enact a shareholder resolution even if it receives a majority vote.

[204] See Pound (1992, p. 67), Ryan, Schneider (2002).

[205] Sparkes, Cowton (2004, p. 5)

[206] See Hebb (2006, p. 387)

CalPERS[207], the California State Teachers' Retirement System (CalSTRS) or the New York based Teachers Insurance and Annuity Association of America – College Retirement Equities Fund (TIAA-CREF).[208] However, apart from these prominent examples, due to passive indexing strategies the size of the corporate holdings by individual pension funds often end up being rather small, thereby restricting their voting power considerably (see section 4.2.5). Therefore, in order to enhance the effectiveness of their shareholder engagement efforts, pension funds may have strong incentives to coordinate their interests by collaborating with other investors.[209]

Another important determinant of the effectiveness of shareholder engagement refers to the type of request. According to Mackey et al., as a profit maximizing entity, a company will most likely be willing to change its practices to the extent that a proposed change will increase its market value.[210] Accordingly, shareholders acting as rational economic investors by pursuing shareholder wealth maximization goals (i.e. showing that there is a business case for the changes proposed) are more likely to succeed. This suggests that the choice of issues on which the shareholder focuses should be guided not only by ethical considerations, but also by operational and financial aspects and ultimately by shareholder wealth maximization goals.[211] Barber as well as Rojas et al. claim that shareholders that can show strong theoretical and empirical evidence that the proposed reforms will increase shareholder value provide incentives to managers to concede concessions.[212] In line with this argument, one could further suggest that the identity of shareholders may play a role. For example mainstream shareholders such as pension funds that tend to pursue a business imperative may turn out to be more effective than mission or values-based investors. This is because the latter may be expected to promote activities that have the potential to reduce the present value of a firm’s cash flows, thereby eventually also accepting a decline in the value of the targeted firm.[213] For example, NGOs that acquire only a limited number of shares in a company for the purpose of confronting the management via company-related public forums may turn out to be less effective simply be-

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[207] See Smith (1996) and Barber (2006) for an analysis of CalPERS’ shareholder activism.

[208] Kinder (2004a, p. 16)

[209] According to Perks et al. the SRI movement is potentially a powerful coalition of interest particularly if it includes substantial institutional investors such a pension funds (1992, p. 61).

[210] Mackey et al. (2007, p. 831), see also Smith (1996, p. 239)

[211] This suggests that governance related proposals are more successful than proposals relating to environmental or social concerns.

[212] See Barber (2006, p. 21), Rojas et al. (2009, p. 4). For example, for the U.K. based asset manager Insight Investment which has engaged with companies on a wide range of social, environmental and ethical issues, a principal factor that guides its selection of engagement topics includes the materiality or business relevance of a particular issue to companies or sectors in which Insight invests (Insight Investment, 2009a).

[213] See Gordon, Pound (1993), Del Guercio, Hawkins (1999, p. 295) Sparkes, Cowton (2004, p. 7), Tkac (2006, p. 2) or Mackey et al. (2007, p. 818). The same may also hold for universal owners (see section 4.2.4) who take a portfolio view when engaging with a particular company that causes negative externalities. As such, the outcome of the engagement activity may be to the detriment of a targeted company, but at the same time value enhancing for the total portfolio of the universal investor.

cause they do not have any financial interest in the companies they invest in and hence have only limited capacity to gather support from other shareholders.[214]

Another factor that may enhance the effectiveness of shareholder engagement concerns the existence of a comprehensive engagement framework that allows for the gradual escalation of pressure on the target company. This is best summed up by the example of FairPensions, which states that the different stages of shareholder engagement are less effective in isolation. “For example, engagement has more influence if there is the option to exercise a relevant vote, and voting has more impact if it is associated with communication to explain concerns. The ultimate sanction of selling a share may be necessary if the risk is sufficiently large and the company unresponsive".[215] According to Rivoli, it is common that at the beginning of the engagement activities SRI investors conduct informal dialogue with the firm.[216] Some funds do this behind closed doors, whereas others provide detailed reports on their engagement activities right from the beginning. An example of the former concerns APG, the asset manager and administrator of the large Dutch pension fund for employers and employees in the Dutch government and the educational sector (ABP), which does not initially reveal the names of the companies they approach. According to APG, they are in a better position to exercise their influence on management within a relationship of trust. "We don’t think that as a first step making the names of the companies public will help us to build that trust and to get a company into a constructive discussion with us.”[217] In contrast, AP1-4 have taken a more transparent approach by publishing a list of the companies they are in talks with (i.e. that may be used by other investors as a reliable blacklist) as well as outlining progress on the discussions.[218] In their annual report the Ethical Council of the buffer funds states that: “Our engagement in a company can also make other companies in the same industry review their procedures and strategies for acting responsibly. [The Ethical Council] wants to disseminate information about and establish an understanding of the work we are doing. We have therefore chosen to publicize the names of the companies with which we are currently conducting an active dialogue and the objectives we want to achieve in each individual case.”[219]

Which strategy is more effective is difficult to determine; however, the success of such dialogues will be enhanced by including a credible threat to disclose details to the public in cases where the outcome of the dialogue is limited. Also both strategies are likely to be more effec-

[214] See Sparkes, Cowton (2004, p. 7), McLachlan, Gardner (2004, p. 14)
[215] FairPensions (2008, p. 8)
[216] Rivoli, (2003, p. 275) . Regional differences in engagement activities also exist. For example, whereas in the U.K. the focus is more on informal dialogue, in the U.S. activities by shareholders are more public and also include the issuing of proxy resolutions.
[217] See Bandel (2008a)
[218] See Wheelan (2008b). According to Barber (2006, p. 9) CalPERS originally did not disclose any information about targeted companies and information about its engagement activities only became apparent when CalPERS formally sponsored a shareholder resolution. In 1992 CalPERS changed its approach by publicly announcing its focus list in an effort to apply public pressure to targeted companies.
[219] See Ethical Council (2008, p. 4)

tive in cases where shareholders show their willingness to vote on an issue or eventually even file their own shareholder resolution.[220] Furthermore, under the specific conditions shown in the previous sections the willingness and ability of the shareholder to divest may create further incentives for management to consider proposed changes.

2.5.2.1.2.2. Contribution to the Generation of New Information

A special case of shareholder engagement relates to the demand for adequate disclosure of CR information. As shown by Amalric, by requiring corporations to disclose such information, investors contribute to the generation of public information without directly influencing strategic decisions.[221] This way engagement on issues of transparency may turn out to be an effective channel to foster the generation and diffusion of market information about the intrinsic value of assets with the capacity to adjust asset prices to fundamentals (see section 2.5.2.1.1.2). According to Davis and Steil, institutional investors in particular seem to contribute significantly to the capacity of markets to mobilize and disseminate such information allowing more efficient allocation of resources.[222] In fact, in the light of recent corporate scandals, Hebb considers such transparency requests as the primary corporate governance concern of activist shareholders including pension funds.[223] A prominent example of this is the request by the Carbon Disclosure Project (CDP) through which a large number of institutional investors (with combined assets under management of USD 55 trillion as of the end of 2009) engage with the largest companies (measured by market capitalization) to disclose their greenhouse gas emissions as well as details of their climate change strategies including information on investment risk and commercial opportunity. The data provided by the companies is made available for use by a wide audience including institutional investors and financial decision-makers.

In 2009 a separate CDP report entitled “The Investor Research Project” explored how the data is being factored into their assessments by investors. According to the report, 77% of respondents indicated that they take account of climate change information in their investment decisions and asset allocations. Moreover, more than 80% of the respondents who do this indicate that climate change is a very or somewhat important factor. There was also general consensus amongst respondents that the materiality of climate change has been increasing over time and it will continue to do so.[224] These results show that coordinated engagement by investors may have the capacity to generate and distribute new information that is otherwise not publicly available. Moreover in the light of the materiality of climate change the generation of such information has the capacity to affect the present value of a firm’s future cash flow.

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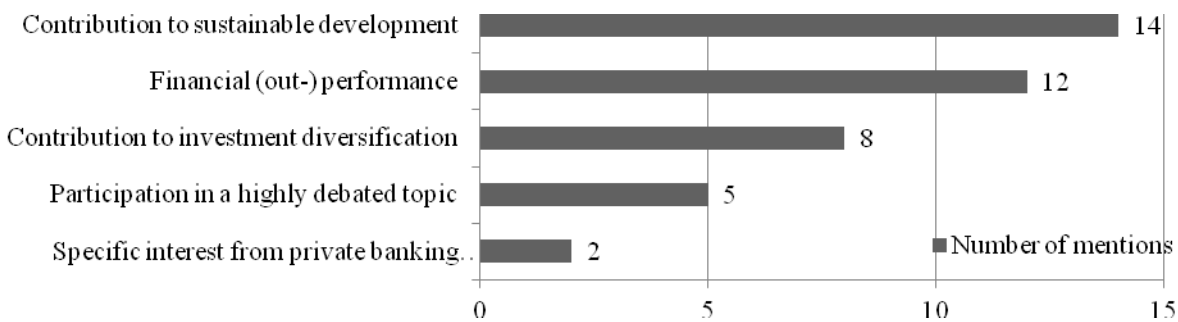
[220] See Del Guercio, Hawkins (1999), Amalric (2004b, pp. 9-10)
[221] Amalric (2004b)
[222] Davis, Steil (2001, p. 21)
[223] Hebb (2006, p. 387)
[224] Carbon Disclosure Project (2009, p. 2)

2.5.2.2. Having an Impact on Society

While the previous sections looked at how SRI investors can impact companies to promote higher levels of CR either through screening, ESG integration or shareholder engagement, it is suggested that other impact driven SRI investors may have the objective of directly contributing to sustainable development or society at large.[225] For example, a survey among senior representatives in charge of the coordination of SRI at Swiss financial institutions showed that the concept of sustainable development and addressing social change in investment decisions ranks equally with other financial rationale (see Figure 12). Whether higher levels of CR promoted either through screening or shareholder engagement automatically lead to a higher societal outcome remains unclear. In fact, one could imagine that self-regulation by companies or industries can turn out to be an effective mechanism to pre-empt the role of governments and impede more stringent and effective regulatory requirements that at the end would be more beneficial from a societal point of view.

FIGURE 12 – MOTIVES OF INVESTORS IN SUSTAINABLE THEMES



Source: onValues (2008, p. 2)

In contrast, an effective means for investors to contribute to sustainable development or society at large is to act through thematic and community investing or the provision of social private equity capital. Since in all these cases investors directly provide organizations with capital, it could be argued that through this form of SRI, which is increasingly being labeled as impact investing, investors have a direct effect on the corporate and organizational landscape within an economy.

2.5.3. Generating Financial Performance

Barbara Krumsiek, President and CEO of Calvert and co-chair of the UNEP FI, describes SRI as a form of investment that not only helps to build a sustainable future and enhance quality of life, but also as one that earns competitive returns.[226] In contrast, others argue that those who

[225] See Wen (2009, p. 308), Beal et al. (2005, p. 71), Lewis, Mackenzie (2000a). While the promotion of CR activities could be considered as a vehicle for social change (Amalric, Hauser (2004a, p. 1) define CR activities as activities “that lead a company to contribute to society beyond the goods and services it produces, the employment it provides, and the returns on investments it generates.”), the exact contours of promoting sustainable development through specific CR activities is less clear.

[226] Krumsiek (2010), see also Moskowitz (1972), Luck, Pilotte (1993), Bauer et al. (2002), Derwall et al. (2005).

invest in SRI often pay a performance penalty for doing so, for example by reducing the opportunity set, which could result in a suboptimal risk-return profile.[227] Again other findings are inconclusive to the extent that there is no statistically significant difference in the financial performance of SRI compared to conventional benchmarks.[228] While these contradictory findings partly result from operational, methodological and sample-specific differences, they are also a direct consequence of the multifaceted approaches to SRI introduced in the previous sections. For example, many studies investigate the performance question by focusing on a single approach (e.g. negatively screened or best in class products), which may lead to apparently contradictory results. Other studies take a broader view by examining SRI funds in general, without controlling for the underlying technique applied, which ultimately results in comparing apples and oranges. For example, although Luther et al. found some weak overperformance for U.K. SRI funds, they argue that the approaches pursued by these funds are too varied (certain funds apply an exclusion strategy, while some prefer positive screening, and others apply a combination of both strategies) to allow an evaluation of the ethical effect on the financial performance of the funds.[229]

Thus, in order to answer the question whether SRI is effective from a financial point of view, one has to carefully differentiate between varying approaches rather than referring to SRI as a one-dimensional concept. In particular, one has to distinguish between traditional forms of SRI, which focus on ensuring value consistency in the first place and more modern SRI techniques that are also aimed at achieving competitive returns or even aimed at outperforming their conventional benchmarks. Therefore, in the following subsections we differentiate between norm-based exclusions (see section 2.5.3.1) as well as shareholder value oriented forms of SRI (see section 2.5.3.2), including positive screening, ESG integration and certain forms of shareholder engagement.[230] With the help of basic financial theory and by referring to existing empirical literature we examine the financial impact of these approaches in terms of risk, return and costs. The conclusions drawn in this subchapter with regard to the financial effectiveness of different SRI strategies are not dramatic, as one has also to be aware that conventional investments have their out and underperformers. Hence it should come as no surprise that SRI products are also only as good as their managers and the respective underlying financial analysis. As a result, one can conclude that for SRI as for any other active investment strategy the challenge is to find the best managers for the respective products.

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[227] See Langbein, Posner (1980, p. 94), Statman (2000), Geczy et al. (2003), Mackey et al. (2007, p. 831), Stewart et al. (2008).

[228] See Hamilton et al. (1993), Luther, Matatko (1994), Guerard (1997), Hickman et al. (1999), DiBartolomeo, Kurtz, (1999), Teoh et al. (1999), Gregory et al. (2003), Bauer et al. (2007), Schröder (2007).

[229] Luther et al. (1992), see also Mallin et al. (1995), Cortez et al. (2008). In contrast, Kempf and Osthoff (2007) distinguish in their analysis between different underlying approaches such a negative screening and best in class selection.

[230] See also approach applied by Hudson (2006).

2.5.3.1. Norm-Based Exclusions

As shown in section 2.3.1, norm-based exclusions or screening constitutes a SRI approach where investors exclude certain companies, sectors or regions from their potential investment universe. As mentioned earlier, this original form of SRI was the preferred technique by faith or values-based investors that engage in SRI with the primary objective of avoiding certain corporate practices deemed unethical, rather than to generate long-term financial performance. In contrast, such values-based exclusions have been rather unpopular among conventional or mainstream institutional investors, for whom this form of investing represents a violation of traditional investment practices. The main reason for their critique follows from the potential loss of diversification that is expected to result from the introduction of norm-based restrictions, which according to modern portfolio theory would leave investors with suboptimal portfolios in terms of risk-return efficiency.[231] It is this argument which typically causes mainstream financial practitioners including pension fund trustees to consider SRI to be inconsistent with their conventional wealth maximization objectives.

As for any investment restriction, the scope of such a potential diversification loss depends on the scope of the restriction applied.[232] That is, the broader the screen, the weaker the potential diversification of the portfolio. For SRI asset managers this raises the question of how to design an effective exclusion strategy that meets the values of an investor and also allows them to meet their financial objectives. As shown in the previous section, these two objectives often contradict each other to the extent that such screens may be designed either more widely in order to meet the demand of mainstream investors or more restrictively in order to be credible from the point of view of an ethically-oriented SRI investor. A shareholder-value focused investor applying an exclusion strategy as a means to eliminate a specific investment risk from its portfolio would have to find the tipping point where such exclusion is not material to the investment outcome in terms of diversification loss. In contrast, an 'ethical performance focused investor' who wants to make an ethical statement with his investment strategy could go much further. To ensure value consistency such an investor could sacrifice financial return by extending the negative screens to suppliers or even financial institutions that provide the financing for the production of the screened good or service.

A further question is how many stocks are needed to construct an efficient portfolio? According to Munnell and Sundén an investor requires only 20-30 stocks to construct a fully diversified portfolio. Similarly, Entine claims that it should take as few as two dozen stocks to ensure diversified performance over an extended period of time.[233] Already in the 1980s Lang-

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[231] See Tippet (2001, p. 172), Hudson (2006, p. 82), Geczy et al. (2003)

[232] See Gregory et al. (2003). Using the example of the South African divestment campaign during the Apartheid regime, Grossman and Sharpe (1986, p. 6) argue that the magnitude of these costs arising from excluding companies from a portfolio depend on the scope of the divestment strategy chosen. According to the authors divesting only the stocks of companies not complying with the Sullivan Principles had little effect on portfolio characteristics and returns. In contrast a comprehensive divestment policy which included all South Africa-related stocks would have had a more substantial impact.

[233] Entine (2007, p. 181)

bein and Posner wrote that there was debate among financial experts as to the optimal degree of diversification. While some believe that careful selection enables the major gains from diversification to be exhausted with not more than 100 stocks, others favor portfolios consisting of thousands of different stocks, including those sold in foreign securities markets.[234] From these numbers it becomes clear that due to the large size of the potential investment universe, investors will most probably have enough stocks available to construct an efficient portfolio. Accordingly, Munnell and Sundén argue that eliminating certain sectors such as tobacco, which accounts for about 1% of the market capitalization of the S&P 500, “should leave enough securities to construct something very, very close to the market index".[235]

Thus, while various authors argue that, if done perfectly, negative screening is probably close to costless in terms of diversification losses [236], others add that such strategies may involve additional costs in the form of higher management fees, depressed share prices (when selling large blocks of assets) or opportunity costs resulting from shunning well performing companies, sectors or even regions for purely ethical reasons. First, there is a persistent view that SRI generally involves higher management fees as information on a company’s CR performance is usually more difficult to assess and hence more costly to obtain than conventional financial data.[237] Although any fees from screening will hurt returns, it has to be noted that negative screening is a rather low-cost approach to SRI, to the extent that fees from screening a portfolio are relatively limited compared to other more research and resource intensive approaches, such as best in class selection, ESG integration or shareholder engagement. According to Luther et al., it is this low cost characteristic of negative screening that keeps this traditional form of SRI popular among many SRI investors.[238] Second, large block holders divesting a large stake of a company’s assets for purely normative reasons may indeed bear additional costs from the negative impact on the company’s share price. As mentioned in section 2.5.2.1.1.1 values-based screening decisions which have the capacity to momentarily cause the share price to deviate from its fundamental value represent a profitable trading opportunity that indifferent market participants would immediately arbitrage on, leaving the SRI investors to bear the costs resulting from a depressed share price.[239] In this context Ryan and Schneider write that in some cases, investors find themselves in the role of reluctant activists who engage in shareholder engagement rather than selling the disputed assets because of the high costs associated with selling their holdings in a portfolio firm.[240] Finally, some authors show that by excluding companies on the basis of normative values, norm-constrained investors pay

[234] Langbein, Posner (1980, pp. 80-81)
[235] Munnell, Sundén (2004, p. 6), see also Drut (2009, p. 9)
[236] See Munnell, Sundén (2004, p. 2), Guerard (1997), Guerard, Stone (2002), Drut (2009)
[237] See Brill et al. (1999) and Gil-Bazo et al. (2008) who find no significant differences regarding fees structures between SRI and conventional funds.
[238] Luther et al. (1992, p. 60)
[239] See Johnson, Greening (1999, p. 566), Cox et al. (2004, p. 27)
[240] See Ryan, Schneider (2002, p. 556)

a financial cost in abstaining from sin stocks.[241] In such situations, attractive opportunities for indifferent investors who are not driven by such normative concerns may arise and correctly value such 'sin stocks'. This effect may be greater the larger the group of investors that shun a certain sector for purely normative reasons. This has been illustrated recently by a report from U.S. pension giant CalSTRS which revealed that by excluding tobacco stocks the fund suffered lost gains of more than USD 1 billion over seven years. As a consequence CalSTRS announced that it could no longer justify excluding the stocks on a financial basis and recommended repealing its exclusion policy.[242]

In sum, although there are a number of arguments why negative screening may have the potential to negatively impact the financial performance of a portfolio, several empirical studies show that investors are still able to add screens to their investment choices without compromising their wealth maximization objectives (see Table 9). In fact, a study by Stenström and Thorell, examining the performance of negatively screened SRI funds in the Swedish market, showed that such products may even outperform when norm-based screens remove companies that do not comply with certain well-established societal standards. Although the findings of this recent study are rather an exception and negative screening techniques are mostly found to be ineffective in obtaining abnormal returns, it is reasonable to conclude from the existing empirical evidence that if done correctly (i.e. not following a radical ethical position) the exclusion of a limited number of companies has very limited financial impact.

TABLE 9 – SELECTED STUDIES ON THE FINANCIAL IMPLICATION OF NEGATIVE SCREENING STRATEGIES

#	Authors	Title of study	Period	Finding
1	Grossman, Sharpe (1986)	Financial implications of South African divestment	1984	Financial impact of exclusions depends on the scope of the screen applied
2	Guerard (1997)	Is there a cost to being socially responsible in investing?	1987 – 1994	No evidence of a screening penalty found
3	Guerard, Stone (2002)	Social screening does not harm performance.	1984 – 1997	There is no significant cost for investors from applying exclusion criteria
4	Geczy et al. (2003)	Investing in socially responsible mutual funds	1963 – 2001	Cost of exclusion criteria depend on beliefs about pricing models and skill
5	Hemley et al.(2005)	Antisocially conscious sectors	1992 – 2002	Sin stocks outperform conventional stocks
6	Kempf, Osthoff (2007)	The effect of socially responsible investing on portfolio performance	1996 – 2005	Negative screening ineffective to obtain abnormal returns
7	Stenström, Thorell (2008)	Evaluating the performance of socially responsible investment funds	2001 – 2007	Exclusion according to norm-based screening can improve performance
8	Statman, Glushkov (2008)	The wages of social responsibility	1992 – 2007	Sin stocks outperform conventional stocks
9	Drut (2009)	Sovereign bonds and socially responsible investment	1994 – 2008	SRI screened portfolios of sovereign bonds can be built without significant diversification loss
10	Hong, Kacperczyk (2009)	The price of sin: The effects of social norms on markets	1962 - 2006	Sin stocks outperform conventional stocks

Source: Own illustration based on Mercer (2009), non-exhaustive list

[241] See Hong, Kacperczyk (2009), Hemley et al. (2005), Statman, Glushkov (2008)
[242] See Wheelan (2010b)

2.5.3.2. SHAREHOLDER VALUE FOCUSED FORMS OF SRI

Contrary to norm-based screening, more recent forms of SRI promote or value higher levels of CR in an attempt to create attractive returns for investors. For example, best in class selection, which involves investing in companies that perform relatively well with regard to certain CR criteria while avoiding bad ones, is more economically oriented in the sense that it assumes that in the long run CR leaders will also outperform financially (see section 2.5.3.2.1). The same holds for thematic investing or ESG integration, by which investors factor material ESG information into their company valuations and trade in situations where flawed valuations are identified (see section 2.5.3.2.2). Regarding shareholder engagement, both values-based and shareholder value oriented shareholders exist. Whereas the former may well promote activities that have the potential to reduce a firm's market value (see section 2.5.2.1.2.1), the latter are expected to act upon the existence of a CR business case and corresponding changes in market prices and financial out-performance (see section 2.5.3.2.3).

Prior to analyzing the financial effectiveness of these approaches, this section briefly outlines how higher levels of CR may impact a firm's financial performance and thereby contribute to increased shareholder value for investors.[243] As in the case of SRI, CR is characterized by the lack of a clear-cut or generally accepted definition as academics and practitioners alike have provided a wide range of varying definitions over time.[244] A useful framework has been defined by Ward, who considers CR as "the commitment of business to contribute to sustainable economic development – working with employees, their families, the local community and society at large to improve the quality of life, in ways that are both good for business and good for development."[245] A key element of this definition is that CR is about the interests and expectations of different stakeholder groups, meaning that businesses should not only monitor and ensure their adherence to the law, but also to ethical standards and internationally accepted norms, as well as the expectations of their stakeholders in general. Thereby, CR serves as a self-regulatory mechanism for companies to factor the impact of their activities on the environment, clients, employees, communities and other stakeholders. While for many this definition is contradictory, with the view that the only responsibility of a business is to its shareholders[246], Amalric and Hauser counter by arguing that CR is about a company's commitment to explore and seize opportunities to enhance a firm's overall contribution to society while it pursues its core objective of value maximization for its shareholders.[247] It is actually this focus on the business case which allows for the differentiation of CR from other non-profit-seeking corporate activities, such as philanthropy and which is at the heart of Barbara Krumsiek's argument that SRI should also be financially sound.

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[243] These underlying mechanisms also apply to other economically oriented forms of SRI such as ESG integration or shareholder engagement.
[244] See Carroll (1999) or Margolis, Walsh (2003) for an overview of the evolution of the concept.
[245] Ward (2004, p. 3)
[246] See Friedman (1970), Crook (2005)
[247] Amalric, Hauser (2004b, p. 3)

According to Amalric and Hauser, the foundation of a CR business case comes from two sources.[248] The first source refers to growing expectations for CR by the immediate stakeholders of a company (e.g. its clients, investors, employees, public authorities and the public at large), while the second source is the prospect that the state will impose new binding regulations. Depending on differing factors, such as the type of company (e.g. its brand value), the sector or the country in which it operates, potential business benefits from CR activities may arise in various areas such as risk or reputation management[249], brand differentiation or human resources management.[250] Correspondingly Ellen Baker states that CR "is an umbrella label that covers a range of choices, dilemmas, principles and values. As a result, there can be no one business case that covers it – each proposed course of action requires its own rationale, will carry with it a degree of judgment, and will require skill in execution in order to achieve success."[251] This lack of a single business case for CR is also reflected by the fact that contrary to conventional financial reporting, there is no uniform standard or methodology for the reporting of CR key performance indicators by industry sector. As a result, practitioners including investors as well as providers of SRI products or indexes often consider a firm's CR performance as a simple proxy for good management, indicating a certain ignorance regarding underlying value drivers.

Numerous studies have examined this relationship empirically and have found evidence both for and against a positive relationship between a firm's CR performance and its financial performance.[252] In the former, regression studies typically support the hypothesis that companies with leading CR practices are better positioned to achieve long-term financial outperformance than companies with below-average CR performance. That is, long-term value added from CR strategies (e.g. investments in security measures to avoid environmental pollution in case of an accident) will be greater than the short-term costs.[253] Accordingly, proponents of CR typically share the view that while in the long-term there is alignment between a firm's CR performance and its profit maximization objectives, there may be a trade-off between the two in the short-term.[254] Hence in their view, corporate managers that focus on quarterly earnings

[248] Amalric, Hauser (2004b)

[249] For example a company's lack of improvement and refusal to co-operate with regard to certain environmental and human standards may put the company's reputation at risk, which may then translate into a financial risk.

[250] See Edmans (2010). Cox et al. (2004, p. 29) and Rauschenberger (2001) provide an overview of possible long-term linkages between the CR performance and financial performance of a firm.

[251] Baker (2008)

[252] For substantive critiques of these exercises, see Wood (1991), McWilliams, Siegel (1999), Rowley, Berman (2000), Margolis, Walsh (2003).

[253] An important contribution in this regard represents a study by Orlitzky et al. (2003) who conducted a large scale meta-analysis of 52 existing studies and which provides statistical evidence for a positive correlation between CR performance and financial performance across industries and varying study contexts.

[254] See Mills et al. (2001, p. 35). Similarly in its 2008 Yearbook, SAM (2008b, p. 20) argues that for example, national regulators determined to internalize the costs of externalities, being an unsustainable

may see a CR strategy as an unnecessary expense that impacts on current earnings.[255] Even though that expense may add value in the longer term, in their view the short-term costs of action outweigh long-term benefits. Similarly, long-term risks (e.g. looming regulatory fines or reputational damage caused by an accident) become less relevant as their vague implications will mostly be felt only over the longer term and supposedly do not impact the current value of a firm.[256] However, long-term investors who are required to optimize portfolio performance over longer term horizons[257] should exhibit a preference for higher levels of CR, because of the compatibility between their investment horizon and the time needed for CR activities to materialize.[258] In fact, some authors consider the factoring of CR information to be imperative.[259]

A necessary condition to be satisfied for different trading horizons to play a role is that markets are inefficient to the extent that current share prices do not reflect all available information in a market (see section 2.5.2.1.1.2).[260] Under efficient market conditions (where prices depend on expected future earnings) the discounted cash flow model states that no tensions exist between long-term gains and short-term performance expectations as any information on investments or capital expenditures by a firm that affect future earnings (either through future cash flow or investment risk) would also affect current share prices.[261] Thus, under such conditions, trading horizons would not have an effect on stock prices to the extent that prices would constantly adjust and reflect long-term risk evaluation in the current stock prices through the discounted current value of future cash flows. Froot et al. write that in such an idealized world "prices are forward-looking and accurately reflect all this information however far into the future. As a result, the announcement of a new investment project, even

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company will increasingly come at a cost to the firm, via taxes, fines, or the purchase of emission allowances, suggesting that the trade-off somewhat suffers from short-termism.

[255] This short-term focus of investors creates incentives for myopic behavior on the part of corporations (see Kochhar, David (1996, p. 74), Bushee (1998, p. 308), Johnson, Greening (1999, p. 566), Statman, Glushkov (2008, pp. 5-6), Makni et al. (2009)). The argument is that confronted with such short-term oriented investors company managers have incentives to reduce or limit investments in projects such as R&D, marketing or CR issues. Addressing environmental or social issues may entail foregoing short-term profits. Instead they rather opt for maintaining a short-term earnings target and avoid earnings disappointment on the part of the investors (see Graham et al. (2005)).

[256] This was affirmed by a group of U.S. investors being interviewed in the context of the sixth Carbon Disclosure Report (PricewaterhouseCoopers, 2008, p. 88) about the use of CDP data in their investment decisions. While some affirmed that information on the exposure of firms to climate change is still part of the general data 'noise' that does not yet provide unique or compelling inputs into the investment decisions of generalist fund managers, other interviewees acknowledged that this view is beginning to change as the quality of information improves and the cost of carbon becomes clearer.

[257] A number of studies have shown that corporate ownership by long term investors, including pension funds and life assurance companies, is positively related to higher levels of CR performance (see Graves, Waddock (1994), Johnson, Greening (1999), Cox et al. (2004, p. 27)) suggesting that there is a preference among such investors to select companies with a good CR performance.

[258] See Graves, Waddock (1994, p. 1035), Sethi (2005, p. 99) or Hesse (2008, p. 7)

[259] See Mahapatra (1984), Cox et al. (2004, p. 29), Hillman, Keim (2001, p. 127)

[260] See Fama (1970)

[261] See Froot et al. (1991, p. 4), Graves, Waddock (1994, p. 1035), Sethi (2005, p. 105)

one that does not pay off for many years, can have an immediate and positive impact on a company's stock price, as investors quickly adjust their forecast of future cash flows. Thus, there is no reason for traders with short horizons to shun the stocks of companies making long-term investments, and no reason for managers to fret over the presence of such traders."[262] While under such perfect market conditions, there would be no room for active portfolio management, under imperfect market condictions, however, different investment horizons of investors may play a role and provide SRI investors with possible trading opportunities.[263]

An efficient market is also characterized by investors that have homogeneous expectations (e.g. they have identical opinions about expected returns, volatilities and correlations of investments).[264] Again this assumption requires that all investors have both the same information and also identical interpretations regarding that information. However, in cases where markets do not understand or follow the investment decisions for a CR program, either because they do not possess the right information about strategy or prospects, short-term oriented investors may again end up considering such a CR program as an unnecessary expense which negatively affects future earnings, leading them to withdraw and eventually pushing down the price of the stock and providing SRI investors that factor such information with attractive trading opportunities. According to Bushee, this information gap between the management of a firm and its shareholders may further widen when the latter simply use current earnings as a proxy for their trading decisions rather than engaging in fundamental research that would attest to the true quality of such corporate investments. According to the author, the underlying information asymmetry between the management of a firm and its shareholders could arise especially if investors have short expected holding periods and focus on predicting near-term price movements instead of valuing long-term prospects.[265] The detrimental effect of such short-term thinking may be that the management of the firm has to decide whether it should suit the interest of the long-term oriented investors or those that have a more short-term view. Managers whose remuneration is closely linked to the development of the current share price may have an incentive not to invest in projects that risk negatively

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[262] Froot et al. (1991, p. 4) provide an example: "Suppose a manufacturing company announces that it intends to spend USD 100 million on plant modernization. The cost savings from the modernization will not start to accrue for two years, so the current impact on cash flow is negative. However, once the cost savings do come on line, they will have a cumulative present value of USD 300 million. If market participants understand the nature of the investment, the company's stock should jump by USD 200 million (the net value of the investment) in value as soon as the announcement is made. Traders do not have to hold the stock until the physical investment in modernization actually pays off to realize a gain - even those with the shortest of holding periods benefit from the company's long term investment".

[263] See Clark, Hebb (2004, p. 8)

[264] See Sharpe (1964)

[265] Bushee (1998, p. 309)

impacting the share price in the short-term even when their main goal is to create long-term shareholder wealth.[266]

Thus, one can conclude that under the condition of weak form efficiency certain SRI techniques may represent an appropriate strategy to identify stocks that are undervalued or overvalued, by including CR aspects in fundamental research and earning profits in the long term. Correspondingly, the Marathon Club defines long-term investing as a "fundamental, research-oriented investment approach that assesses all risks to the business and which has a focused discipline of seeking positive returns over the long-term business cycle"[267]. In particular, this involves "a proper assessment of all risks, including threats due to the competitive environment, the factors of supply and production, labour, technology, regulation, political and economic stability, governance, environmental, social and reputation costs"[268]. As will be shown in the following subsections, best in class selection, thematic investment, ESG integration, as well as certain forms of shareholder engagement all have in common that they factor such information into their investment and ownership decisions in an attempt to benefit from market inefficiencies.

2.5.3.2.1. Best in Class Selection and ESG Integration

Regarding potential costs, best in class selection and ESG integration can be considered to be similar to the extent that both approaches use sustainability research to identify, integrate and manage CR value drivers in the selection of assets, so that under the condition of weak market efficiency investors can benefit from mispriced assets. The costs of information gathering and assessing and ranking the overall performance of companies according to a long-list of criteria are relatively high and have to be covered by sufficient IA. However, in both cases, the purpose of research is to improve the selection of assets. The benefits expected to balance the costs of research stem from expected out-performance and possibly also higher fees.[269] In terms of portfolio risk, best in class products typically select those companies from a broad market index that demonstrate leading CR practices within their sector, thereby avoiding a priori exclusions of whole sectors from the investment universe. As a result a best in class portfolio is usually broadly diversified, involving only a low risk differential with regard to a benchmark portfolio and therefore is also suited to being a core investment strategy. Hence, in terms of risks, potential diversification losses are not as severe as in negative screening, where

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[266] Bushee (1998, p. 307) shows that shareholder ownership by short-term oriented investors characterized by high portfolio turnover and momentum trading strategies (buy/sell firms with good/bad earnings news) significantly increases the likelihood that managers cut R&D to manage earnings. Similarly, Graham et al. (2005) showed that the majority of managers avoid initiating even positive net present value projects if this resulted in falling short of the current quarter earnings.

[267] Marathon Club (2007, p. 5) The Marathon Club is a London-based collaboration of pension fund trustees and industry specialists in long-term investment issues.

[268] Marathon Club (2007, p. 5)

[269] One could argue that the effectiveness of these techniques are different to the extent that best in class products often use CR ratings as a simple proxy for good management whereas ESG integration explicitly searches for the underlying value drivers.

whole sectors or regions may be excluded. Similarly, to the extent that ESG integration does not exclude specific companies or sectors from a portfolio, there are no diversification losses involved with this strategy. Instead, to the extent that ESG integration is about correctly factoring material environmental and social risks into the stock valuation process ESG integration aims to reduce overall investment risk.

In cases where ESG integration and best in class selection contribute to the generation and diffusion of material information and thereby are effective in changing asset prices, the asset manager's financial performance will likewise be attractive. The more this is so, the more timely his actions are relative to those of other investors. If asset prices do not change in the short run, financial performance will nevertheless tend to be attractive in the long run once the true value of CR activities materializes. Sethi specifies that such forms of SRI "can best be characterized as investing in companies that conduct their operations with an eye on causing the least amount of harm to the environment and sustainability of our habitat. They are conscious of their responsibility to various stakeholders from the unintended consequences of corporate actions. In economic terms, these companies minimize negative externalities and accentuate positive externalities. [...] Consequently, these companies also minimize future financial risks emanating from imprudent or unsafe business practices. Thus, companies conducting their operations in a socially responsible manner should be viewed as comparatively better and relatively safer long-term investment choices."[270] As such, both strategies can be considered to be forms of active portfolio management, where asset managers try to beat conventional benchmarks by trading on mispriced securities assuming that such information is not sufficiently reflected in the company valuation.[271] According to Schäfer and Stederoth this is analogous to the active selection of attributes such as value, growth, small, mid and large cap, certain sectors or regions.[272] Hence investors applying this strategy assume that markets are inefficient in the sense that they do not sufficiently factor such extra-financial information into stock valuations and therefore provide an investment opportunity.[273]

Although there are only a few studies that explicitly investigate the financial performance of best in class products[274], various studies have provided evidence that firms with higher levels of CR also outperform financially, which indicates that in certain situations financial markets do not sufficiently value this kind of information (see Table 10). For example, whereas Statman and Glushkov find that norm-based screening results in a return disadvantage relative to conventional investors, they also find that portfolios composed of companies with strong CR records provide a return advantage relative to conventional investors. Similar evidence has

[270] Sethi (2005, p. 101)

[271] The assumption is that certain risks or opportunities that relate to a company's responsibilities are completely overlooked by mainstream financial analysts causing the corresponding share price of a company not to be fairly valued by the market.

[272] Schäfer, Stederoth (2002)

[273] See Dembinski et al. (2003, pp. 208-209), see Edmans (2010)

[274] For example Derwall et al. (2005)

been provided by Moskowitz, Vance, Orlitzky et al., Derwall et al., Kempf, Osthoff, Edmans or Hoepner et al. whose findings support the hypothesis that certain CR factors are material to company value and hence investors may take advantage in cases where the market has not yet caught up with new information. By factoring such information SRI investors contribute to the distribution of new material information which results in greater market efficiency.

TABLE 10 – SELECTED STUDIES ON THE PERFORMANCE OF BEST IN CLASS & ESG INTEGRATION

#	Authors	Title of study	Period	Finding
1	Moskowitz (1972)	Choosing socially responsible stocks	1972	Firms with higher levels of CR also outperform financially
2	Vance (1975)	Are socially responsible corporations good investment risks?	1972 – 1975	Discusses the relationship between CR and corporate performance
3	Orlitzky et al. (2003)	Corporate social and financial performance: a meta-analysis	meta-analysis	CR and to a lesser extent, environmental responsibility is likely to pay off
4	UNEP FI (2004)	The materiality of social, environmental and corporate governance issues to equity pricing	meta-analysis	There was agreement that environmental, social and corporate governance issues affect long-term shareholder value. In some cases these effects may be profound.
5	Derwall et al. (2005)	The eco-efficiency premium puzzle	1995 – 2003	Mean return of best in class portfolios outperforms conventional benchmarks
6	Kempf, Osthoff (2007)	The effect of socially responsible investing on portfolio performance	1996 – 2005	Stocks of companies ranked high on community, diversity, employee relations, environment, human rights and products did better than stocks that ranked low
7	Statman, Glushkov (2008)	The wages of social responsibility	1992 – 2007	Stocks of companies with high CR ratings outperformed companies with low ratings
8	Edmans (2008)	Does the stock market value intangibles? Employee satisfaction and equity prices	1984 – 2006	Employee satisfaction is positively related to corporate performance
9	Makni et al. (2009)	Causality between corporate social performance and financial performance: evidence from Canadian firms	2004 – 2005	Note a significant negative impact of the environmental dimension of CR performance and the financial performance of the firms examined
10	Hoepner et al. (2010)	Corporate social responsibility across industries: when can who do well by doing good?	2005 – 2008	CR has substantial value for corporations in the health care, industrial and consumer discretionary sectors.

Source: Own illustration based on Mercer (2009), non-exhaustive list

2.5.3.2.2. THEMATIC INVESTMENTS

As defined in section 2.3.2.2, thematic or pioneer investing refers to the selection of companies of the future that derive market opportunities from the wider challenges society faces and are expected to be strong in the market by driving performance over the medium to long-term (e.g. companies that offer solutions or technologies to address climate change, water scarcity, ageing populations, infrastructure, clean technology, forestry, etc.). As such thematic SRI products typically have more concentrated portfolios to the extent that they exclude large areas of the stock market and often focus also on small and mid-cap companies (rather than large caps that have only a small proportion of their business exposed to a specific sustainability theme). In the past, this strong bias caused thematic products to experience relatively high volatility, which qualified them rather for satellite than a core investment strategy. In terms of fees, thematic products do not necessarily generate similar costs to those best in class products in cases where no sustainability analysis is involved in the portfolio construction. In contrast, where constituents also have to fulfill sustainability criteria, fees could achieve similar levels to the best in class products.

The underlying motivation of thematic investment is to look at areas of the market which are the most fruitful to find stocks that will outperform. Assuming weak market efficiency, this means that thematic investments focus on structural changes with regard to regulation, technology, demographics or societal expectations and recognizing companies that benefit from these changes can lead to excess returns for investors. As a result of the growing concerns of consumers and investors as well as governments on issues of sustainability and the fact that these issues will exert a growing influence on the economic performance of companies, thematic investments around themes such as clean tech, renewable energy, water, etc. have recently become attractive investments.[275] SRI investors identified these themes at an early stage and therefore can be assumed to have had a first mover advantage to capitalize on this trend ahead of other mainstream investors.

2.5.3.2.3. Shareholder Engagement

Because of the potential costs associated with excluding large blocks of assets, institutional investors such as pension funds often engage with companies before excluding them from their investment portfolio. Obviously such engagement efforts are not free. In addition to the costs of acquiring information (which is similar to other SRI forms such as best in class selection or ESG integration) shareholder engagement also carries the direct costs of interacting with companies (e.g. dialogue with companies, participation in a general meeting). These costs may be reduced by pooling votes and engaging collectively with other shareholders or by engagement overlays where the shareholder delegates his rights to an external manager who bundles the rights of many investors and thereby eventually achieves sufficient power to influence the management of a firm. Although extra costs may be incurred to compensate the manager for his engagement activities, economies of scale will help keep these costs at a lower level than if managed by each shareholder separately. On the risk side, there is no loss of diversification as shareholder engagement in principle can be offered without requiring a change in the composition of portfolios. However in order to become effective in terms of improving a company's practices (see section 2.5.2.1.2), investors applying engagement strategies are better positioned when they hold a larger number of stocks of an individual company, which in return may negatively impact portfolio diversification.

As stated by Smith, among other things institutional investors who are involved in shareholder advocacy for CR and good governance usually petition companies in an attempt to preserve long-term shareowner value by promoting companies to adopt good governance practices and act as good corporate citizens or socially responsible business entities.[276] Thus

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[275] Typically, thematic products do not compare returns to any specific benchmark as in the case of best in class products.
[276] Smith (2004)

costs resulting from shareholder engagement may be recovered given careful selection of target companies based upon the existence of a business case and corresponding changes in market prices and financial out-performance as a result of the engagement efforts. As for other SRI strategies, diverging views exist regarding the effectiveness of this strategy to generate increasing shareholder value (see Table 11).[277] While some studies find positive effects, others argue that there is no long-term financial benefit from engaging with firms. Again others even suggest that companies that are being targeted by activist shareholders suffer from a decline in the share price due to signaling effects to the market that the management of a firm is unwilling or unable to negotiate a settlement with its shareholders, raising doubts about the effectiveness of shareholder engagement as a strategy to increase shareholder value. According to Munnell and Sundén, a reason for these diverging findings is that it is generally hard to evaluate the success of shareholder engagement strategies using survey data because so many factors affect the bottom line.[278]

TABLE 11 – SELECTED STUDIES ON THE PERFORMANCE OF ENGAGEMENT STRATEGIES

#	Authors	Title of study	Period	Finding
1	Smith (1996)	Shareholder activism by institutional investors: evidence from CalPERS	1987 – 1993	Finds that shareholder wealth increases for firms that adopt or settle issues raised by CalPERS and decreases for firms that resist.
2	Wahal (1996)	Pension fund activism and firm performance	1987 – 1993	No evidence of significant long-term improvement in either stock price or accounting measures of performance in the post-targeting period.
3	Gillan, Starks (1999)	Relationship investing and shareholder activism by institutional investors		There is a significant wealth gain from engagement in the short-term that is not sustained in the long-term
4	Del Guercio, Hawkins (1999)	The motivation and impact of pension fund activism	1987 – 1993	Found no evidence that activism had a significant effect on stock returns over the three years following the proposals.
5	Prevost and Rao (2000)	Of what value are shareholder proposals sponsored by public pension funds	1988 – 1994	Firms experience negative wealth effects, when targeted. Firms, being targeted several times by public pension funds experienced permanent declines in market value.
6	Gillan, Starks (2000)	Corporate governance proposals and shareholder activism: the role of institutional investors	1987 – 1994	The nature of the stock market reaction, while typically small, varies according to the issue and the sponsor identity.
7	English et al. (2004)	The "CalPERS effect" revisited	1992 – 1997	Find evidence of some improvement limited to 6 months from the announcement of the targeting.
8	Klein, Zur (2006)	Entrepreneurial shareholder activism: hedge funds and other private investors	2003 – 2005	Find that activism benefits existing shareholders of the targeted firms.
9	Barber (2006)	Monitoring the monitor: evaluating CalPERS' activism	1992 – 2005	Estimates the total wealth creation from CalPERS activism on focus list firms to be USD 3.1 bn
10	Becht et al. (2009)	Returns to shareholder activism: evidence from a clinical study of the Hermes U.K. Focus Fund	1998 – 2004	Abnormal returns by the Hermes U.K. Focus Fund are largely associated with engagements rather than stock picking.

Source: Own illustration based on Mercer (2009), non-exhaustive list

[277] Typically these studies focus on engagement strategies around corporate governance issues (e.g. shareholder rights, executive remuneration). No evidence has been found on the effectiveness of engagement practices around wider CR issues including environmental and social aspects.

[278] Munnell, Sundén (2004, p. 26)

Contrary to other SRI strategies such as screening or integrated valuation that focus on asset selection, in the case of shareholder engagement, any positive impact on the financial performance of a targeted firm has to be shared among all investors (see section 4.2.5). Thus while costs for monitoring and engaging have to be borne only by the activist shareholders, benefits are also shared with passive minority shareholders that free ride on the efforts of the larger activist shareholder.[279] Hence activist shareholders need to hold sufficient assets of a company to ensure that their engagement strategy is also effective from a financial point of view.

2.5.3.3. Social Private Equity / Community Investments

From a financial perspective, investments in social private equity only make sense if there is a business case for the products developed. Like the differing effects between the two screening methods and ESG integration, financial performance will be a matter of chance if the concrete business case is merely assumed to exist a priori but not analyzed and valued accordingly. In addition, since the financial performance will depend on the fund’s exit opportunities, there will be a need to communicate the value created by the investee companies to the investors taking over the private equity fund’s stake upon exit. It may also pay to consider network or cluster effects that emerge when investee companies’ or organizations’ activities benefit – without full compensation – other companies in the portfolio of the pension fund. Clearly, pension funds can only consider investments in social private equity and community investments as a relatively small addition to their overall portfolio, otherwise there would be large losses in diversification.

[279] See Shleifer, Vishny (1986, p. 462), Monks (1995, p. 2), Froot et al. (1991), Pound (1992, p. 67), Barber (2006, p. 5)

3. THE SRI BEHAVIOR OF SWISS PENSION FUNDS

Although there are indications of an increasing participation of Swiss pension funds in SRI, only few details are known about their specific SRI behavior and attitudes. This restricted picture largely results from the fact that only few pension funds publicly disclose information on their SRI behavior, which makes systematic analysis of their SRI practices challenging. It could be argued that they are at an early stage in developing a consistent and comprehensive SRI strategy and that therefore most Swiss pension funds keep a low profile with regard to this non-standard investment practice and abstain from actively communicating with their beneficiaries and external stakeholders. This low-key approach is also reflected in the limited number of Swiss funds taking a public position on this topic within the UNPRI framework. Whereas Swiss-based asset managers play a key role in this field (see Table 13), Swiss pension funds are mostly absent. As of mid 2009, only two pension funds have signed up to the principles out of a total of 182 asset owners (see Table 12).[280] In contrast, in countries such as Australia, the U.S., Brazil, the Netherlands, Denmark, the U.K. or Sweden, pension funds have taken a much more active and public position.

As will be shown in more detail in chapter 4, at the level of a single pension fund there are a variety of reasons to explain why there is greater awareness for SRI among certain funds. At a macro level, pension fund regulation plays an important role in promoting SRI practices and can be used to explain why in some countries SRI is more prominent among pension funds than in others.[281] The first example of SRI related regulation targeted at pension funds came into force in July 2000 in the U.K. The U.K. Pension SRI Disclosure Regulation required trustees of occupational funds to disclose in their statement of investment principles (SIP) the extent (if at all) to which social, environmental and ethical considerations are taken into account (even if their position is that they do not consider such issues) and to disclose the policy (if any) directing the exercise of shareholder rights. According to Lydenberg “this requirement has been remarkably effective in prompting pension funds to recognize their responsibilities in these areas”.[282] Similar disclosure requirements for pension funds exist in Australia[283], France, Belgium, Germany, Italy and Sweden.[284] In addition, in some countries, public funds have been legally required to take account of SRI. For example, according to Bengtsson, the rise of SRI among various Scandinavian public pension funds can largely be attributed to such regulatory incentives.[285] The same holds also for the French Pensions Reserve Fund (FRR) the largest public pension fund in France, which has been mandated to con-

[280] The four asset owners reported in Table 12 include two pension funds (CIA and the pension fund of the Cantonal Bank of Zurich) one reinsurance company and one foundation.
[281] See OECD (2007) for an overview of regulatory developments regarding SRI.
[282] Lydenberg (2002, p. 68)
[283] See Rajagopal (2009)
[284] In Switzerland regulation exists regarding the disclosure of voting practices (see article 49a § 2, BVV2).
[285] Bengtsson (2008, p. 976)

sider ethical criteria in its investment policy. In the U.S. an important factor for the high number of funds engaging in SRI under the 401(k) framework is that defined contribution (DC) plans respond to a growing demand from beneficiaries.[286]

TABLE 12 – NUMBER OF INSTITUTIONAL ASSET OWNERS SIGNATORY TO THE UNPRI, BY COUNTRY

UNPRI Signatories	Number of Asset Owners	UNPRI Signatories	Number of Asset Owners
Australia	28	Canada	6
USA	22	France	4
Brazil	18	**Switzerland**	**4**
Netherlands	15	Norway	4
Denmark	15	Japan	3
U.K.	14	Iceland	3
Sweden	10	Germany	2
New Zealand	9	Belgium	2
Spain	7	South Africa	1
Finland	7	Italy	1

Source: List of UNPRI signatories as of July 2009

A difficulty in gaining a better understanding of the practices of Swiss pension funds with regard to SRI relates to the fact that no comprehensive aggregated data exists on their SRI behavior. Whereas onValues provide data that give an adequate picture on the supply side of the Swiss SRI market, it is not fully instrumental to assess the total assets invested by Swiss investors as they may also demand SRI products managed by foreign asset managers. In contrast, the Swiss Federal Statistical Office (FSO), which publishes a comprehensive survey every two years on the Swiss pension market and in which all pension funds participate, does not address SRI as a specific subject. The best source of information is provided by Swisscanto through its annual Swisscanto Pension Fund Survey (SPFS), which covers up to 280 funds in its sample and provides a partial view of the Swiss pension market. The first version of the SPFS was issued in 1999 and has become established as one of the most recognized annual sources of information on the Swiss pension system.[287] The underlying survey instrument consists of two sections. A standard section includes questions addressing general issues about the pension funds (e.g. name, contact details, legal and administrative form, number of beneficiaries), balance sheet information (e.g. assets and liabilities), profit and loss accounts (e.g. administrative costs, performance data) and contributions. A second section addresses current topics from ongoing political discussions. In the past, this included questions on pension governance (2007), SRI (2008) or the impact of the financial crisis on the funding level of the pension funds (2009). Importantly, since 2002 the survey instrument has included a specific question on SRI in its standard section asking for the share of the pension portfolio that is invested according to SRI criteria (see Figure 27). In addition to this specific

[286] See Social Investment Forum, Mercer Investment Consulting (2007)
[287] See Ammann, Zingg (2008b, p. 6)

SRI related question in the standard section, in its 2008 edition the SPFS also contained a separate and extensive section on SRI.

Both the single question from the standard part as well as the specific section on SRI provide the basis for our subsequent description of how and why Swiss pension funds engage in SRI (see section 5.3).[288] To answer these two questions, in this chapter we begin with a general review of the Swiss SRI market on the basis of onValues data for the period 2006 – 2009 (see section 3.1). To the extent that no comprehensive picture on the SRI behavior of Swiss pension funds exists, looking at the market from a different angle (supply side) allows for a better overall understanding of their role. Based on demand-side data gathered by Swisscanto at the end of 2007, in section 3.2 we then explore what pension funds effectively do when they engage in SRI by looking at the specific SRI behavior and attitudes of a restricted sample. This rather descriptive chapter is followed by the empirical analysis of the determinants of the SRI behavior of Swiss pension funds (see chapters 4 – 6).

3.1. SWISS SRI OFFERING

A difficulty in describing regional SRI markets arises from the rather loose definitional boundaries for SRI described in section 2.1, which cause considerable problems in the generation of precise and comparable figures. Regional SRI industry associations such as Eurosif or the U.S. based Social Investment Forum (SIF) have made a considerable effort in the past to standardize the compilation of SRI data and can generally be considered the best source of information. However, it has to be noted that reported figures on the size of SRI markets are usually only an approximation and are dependent on the willingness of market participants (i.e. asset managers) to disclose such information.[289] For the Swiss market, onValues,[290] a Zurich-based investment consultancy firm provides an aggregation of SRI data since 2005 by collecting the information directly from local asset managers via customized data sheets. Since the data incorporates only those assets from domestic asset managers participating in the survey, onValues suggests that the reported figures should be seen as an approximation and that the true volumes of SRI are probably larger.[291]

Eurosif considers Switzerland as one of the leading countries in Europe in terms of total assets invested in SRI.[292] As shown in Figure 13, the Swiss market has continuously grown in recent years, reaching a maximum by the end of 2007 with a total of IA of CHF 34 billion, which

[288] For a copy of SPFS 2008 see section 8.1. The separate part on SRI is included in sub-section E.

[289] Such reports usually include only assets of those asset managers who are located and managed within a country. As such they combine assets from domestic as well as foreign investors managed by domestic asset managers but not those that are managed abroad by a foreign asset manager. Furthermore, such reports do not include those assets that are with a domestic asset manager but managed in a foreign jurisdiction.

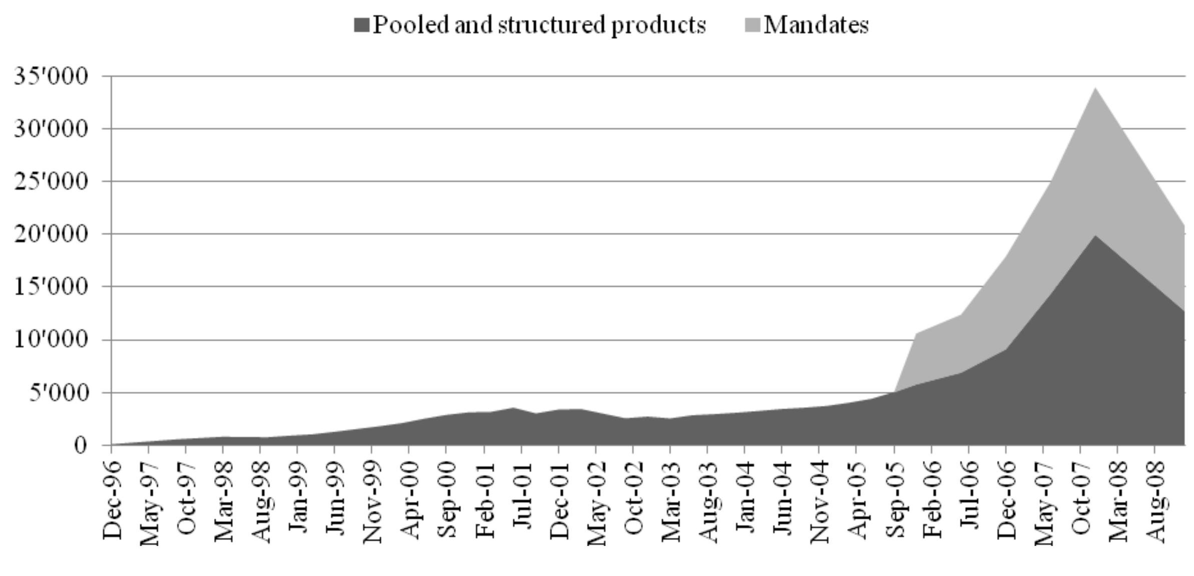
[290] See www.onValues.ch. The same set of data is also used by Eurosif, which aggregates national SRI trends on a European level.

[291] onValues (2009, p. 3)

[292] See Eurosif (2008, p. 45)

corresponds to an increase of 67% in 2007. According to Eurosif, this growth rate has been well beyond the growth rate of the overall Swiss market, positioning the Swiss SRI market as one of the fastest growing markets in Europe. In 2008, this trend was reversed by the impact of the financial crisis, which caused the SRI market to shrink by 38.7% down to CHF 20.9 billion at the end of 2008.[293] This drop in IA can mostly be attributed to severe corrections in the global equity markets as equity is the preferred asset class of SRI products in Switzerland (see Figure 15). Interestingly, net sales have proved rather stable, as according to onValues asset inflows in existing and new SRI products, particularly in lower-risk broadly diversified equity, strategy and fixed-income funds more than compensated for asset outflows that were especially pronounced for higher-risk theme funds.[294] The relative success of SRI can be attributed to different factors, such as the continuous awareness of investors about corporate scandals or issues such as climate change and the view that SRI represents an appropriate means to address these challenges. In addition, various sources consider SRI investors to have a higher degree of loyalty than conventional investors, which is accentuated in periods of economic downturn.[295]

FIGURE 13 – SRI IA FROM DECEMBER 1996 TO AUGUST 2008



Source: onValues (2009)

Despite considerable growth rates over recent years and a strong relative performance during the crisis, the market share of SRI products in the overall financial market remains at a low

[293] According to onValues (2009, p. 4) conventional fund categories of Swiss providers decreased by 40.2% year to year, suggesting that SRI still performed relatively well during that period.

[294] onValues (2009, p. 8)

[295] According to Brown (2007, p. 13) there is evidence that SRI investors are more loyal to their investment choice than the average mainstream investor, citing a study from 1997, which showed that SRI investors stayed 'loyal' to a SRI investment, even if it performed badly. According to Brown, this finding has been confirmed by another survey in 2001 by a U.K. based provider of SRI funds. Furthermore, an investor survey conducted by Citigroup during the market fallout in 2008 reinforced the hypothesis that SRI investors are more loyal than conventional investors (see Davis, Tyrrell (2008)).

level with only 3% of total IA[296], which confirms that SRI still represents a niche market in Switzerland. In contrast, in other countries SRI is reported to achieve a much higher market share (e.g. 20% in Canada[297], 11% in the U.S.[298] and above 6% in the Netherlands).

3.1.1. Main Providers of SRI Products

According to Eurosif, Swiss banks and asset managers were among the first to offer SRI and to develop expertise in this field.[299] Today, they are also among the most active in providing SRI products and services, as illustrated by the number of signatories to the UNPRI (see Table 13). As of mid July 2009, 18 asset managers and 10 professional service partners[300] have signed up to the UNPRI, ranking Switzerland 5th behind the U.S., Australia, the U.K. and France.

TABLE 13 – SIGNATORIES TO THE UNPRI, BY COUNTRY

UNPRI signatories	Asset managers	Professional service partners	Total
United States	50	19	69
Australia	43	16	59
United Kingdom	35	11	46
France	24	6	30
Switzerland	**18**	**10**	**28**
South Africa	19	4	23
Netherlands	13	4	17
Canada	11	5	16
Brazil	9	2	11
Sweden	8	2	10

Source: UNPRI list of signatories as of July 2009

The main providers of SRI which have participated in the onValues 2008 market survey include (in alphabetical order): Coop Bank, Care Group, Credit Suisse, Dr. Höller, EPS Value, Ethos, LODH, Migros Bank, Pictet, Raiffeisen, responsAbility, SAM, Sarasin, Swisscanto, UBS, Vontobel, Zegora and ZKB.[301] They can be broadly classified into four groups according to their varying commitment to SRI: (i) fully committed SRI specialists like Ethos or SAM including, (ii) alternative and niche distributors such as Alternative Bank Switzerland, Coop Bank or Migros Bank, (iii) banks with no stock or private ownership structure and with a stakeholder-oriented company mission and strong retail client base like Raiffeisen, Swisscanto or ZKB and (iv) other banks including large global players such as Credit Suisse

[296] Eurosif (2008, p. 11)
[297] See Social Investment Organization (2009, p. 5)
[298] See Social Investment Forum (2007, p. iv)
[299] See Eurosif (2008, p. 45)
[300] This group includes a large variety of SRI service providers such as analysts, investment consultants, risk managers, etc.
[301] onValues (2009, p. 5)

and UBS as well as private banks like Sarasin, Pictet and Vontobel. For this latter group the SRI offering represents only a small fraction of their total IA (see Table 14).

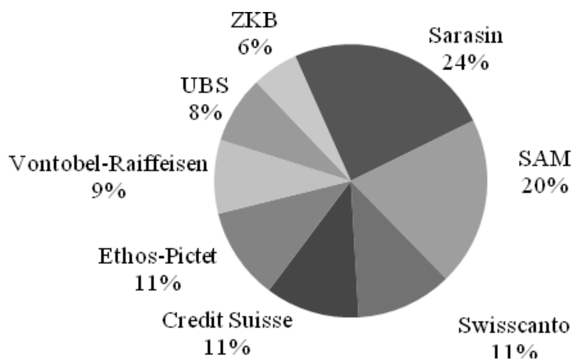
TABLE 14 – SRI SHARE TOTAL ASSETS BY MAIN SRI PROVIDERS IN CH

Name of Asset Manager	IA m USD	SRI IA m USD	SRI as % of IA	SRI share by 2010[302]
SAM	6‘986	6‘986	100	100
Ethos	1‘266	1‘266	100	100
Sarasin & Cie	73‘259	7‘056	9.63	15
Swisscanto	55‘516	2‘355	4.24	10
Zurich Cantonal Bank	105‘472	878	0.83	2
Pictet Asset Management	125‘732	10‘765	8.56	-
Vontobel	70‘168	1‘942	2.77	5
UBS AG	2‘814‘656	34‘298	1.22	-
Credit Suisse	1‘372‘200	2‘194	0.16	30

Source: Responsible Investment (2008, p. 4)[303]

The Swiss SRI market is dominated by a group of committed SRI specialists as well as banks with a clear strategic commitment towards SRI and sustainability (see Figure 14). In comparison, large universal banks like UBS and Credit Suisse struggle with a relatively low market share, which suggests that they are not associated with SRI to the same degree as specialized SRI providers and that their expertise in sustainability or SRI is not considered as their core competence. In addition, major banks eventually also suffer from a bad image among potential SRI investors, as they are more likely to be involved in controversial issues and scandals (e.g. exposure to subprime lending, excessive executive pay, controversial lending through their investment banking arms). Niche distributors such as Alternative Bank Switzerland, Coop Bank or Migros Bank accounted only for 3% of the total market volume in 2006.[304]

FIGURE 14 – MARKET SHARE OF SWISS ASSET MANAGERS, 2008



Source: onValues (2009, p. 5)

302 Expected share of SRI IA by the end of 2010

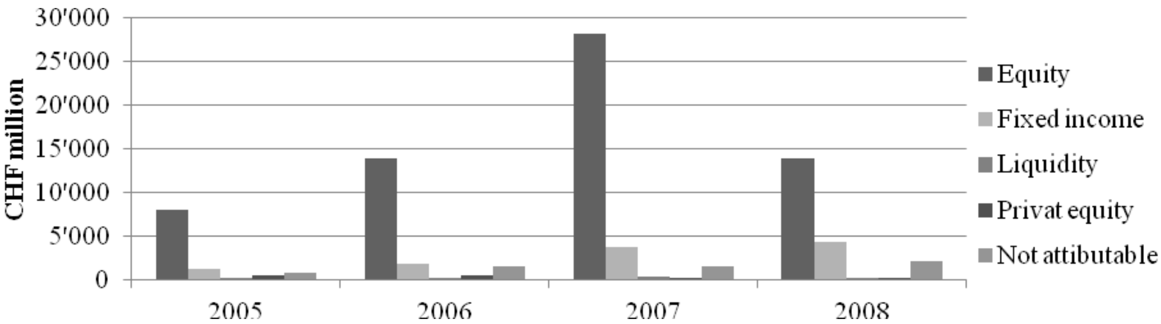
303 These figures do not only include SRI IA within Switzerland but also assets held by clients abroad.

304 See onValues (2007, p. 4)

3.1.2. Characteristics of SRI Offerings

Equity has traditionally been the most important asset class, whereas fixed income plays only a minor role and the share of liquidity or private equity-based products is negligible (see Figure 15). As a result of the financial crisis, the share of equity-based products has dropped significantly, from 83% of total SRI IA in 2007 to 67% by the end of 2008. Accordingly, the share of less risky fixed income-based products increased from 11% to 21% by the end of 2008.[305] Asset allocation has become more aligned with average allocation in Europe, where by the end of 2007 equity accounted for only 50% of SRI IA and fixed income for 39%.[306]

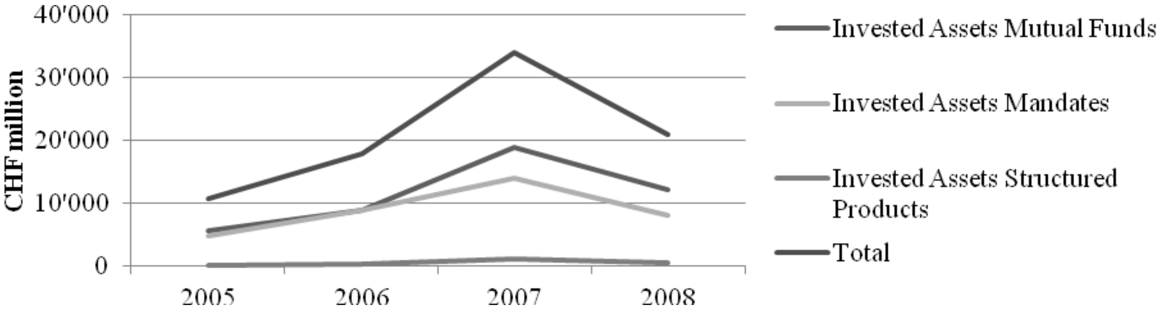
FIGURE 15 – EVOLUTION OF ASSET CLASSES IN SRI PRODUCTS BY SWISS-BASED ASSET MANAGERS



Source: Based on data from the onValues annual surveys 2006 – 2009

The majority of SRI is invested in mutual fund products, which account for approximately CHF 12.2 billion, representing 59% of the total by the end of 2008 (see Figure 16). They are followed by individual mandate solutions with up to CHF 8.1 billion (38.9%) and structured products accounting for only CHF 556 million (2.7%).[307] As shown by the graph, SRI funds experienced a steeper growth rate prior to the crisis, reflecting the important role of retail and private banking clients in the Swiss SRI market (see Figure 25) and their demand for standard vehicles rather than tailor-made solutions (see Figure 17).

FIGURE 16 – EVOLUTION OF INVESTMENT VEHICLES 2005 – 2008



Source: Based on data from the onValues annual surveys 2006 – 2009

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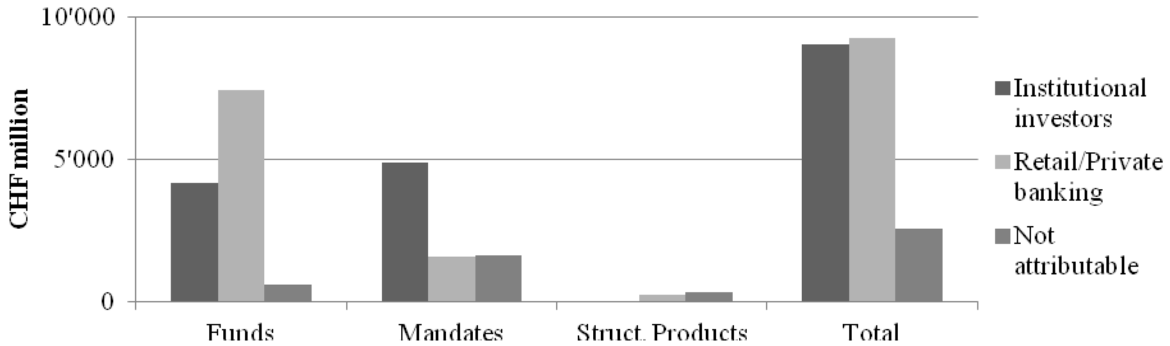
[305] See onValues (2009, p. 6); according to the study in 2008 six new fixed income funds have been launched in the Swiss market.

[306] Eurosif (2008, p. 15)

[307] See onValues (2009, p. 9)

As shown in Figure 17, funds are the preferred vehicle for retail and private bank clients, accounting for 61.2% of their total holdings. In contrast, mandate solutions that allow investors to take account of their own criteria are the preferred investment vehicle for institutional investors, accounting for 60.4% of their total holdings (compared to only 19.5% of retail and private banking client holdings, which presumably can mostly be attributed to HNWIs).

FIGURE 17 – INVESTMENT VEHICLES BY INVESTOR TYPES, 2008

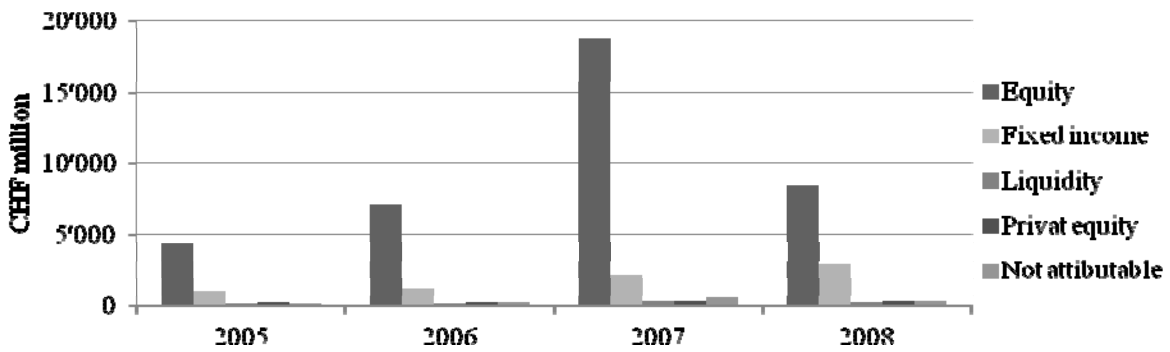


Source: onValues (2009, p. 9)

3.1.2.1. SRI MUTUAL FUNDS

The volume of SRI funds offered by asset managers in Switzerland has continuously increased in the past years peaking at the end of 2007 with a total of CHF 18.6 billion (see Figure 16). In the course of 2008, fund volumes collapsed by 35.3%, down to CHF 12.2 billion at the year end. As shown in Figure 18, this impact was particularly severe due to the equity focus of these funds (69.5% compared to 24.3% of fixed income SRI products and 2% money market funds). To the extent that the equity share of all Swiss funds is considerably lower (23.2%), the market share of SRI funds has declined from 2.8% in 2007 to 2.5% in 2008.[308]

FIGURE 18 – ASSET ALLOCATION OF SWISS SRI FUNDS 2005 – 2008



Source: Based on data from the onValues annual surveys 2006 – 2009

[308] According to data from onValues surveys 2008 and 2009 and www.swissfunddata.ch

Despite the severe decline in assets in 2008, the number of SRI mutual funds available to the Swiss market has further grown, showing a continuous belief by asset managers in the potential of this market.[309] This holds also for other markets. For example the number of publicly available SRI funds in Germany, Austria and Switzerland has increased from September 2008 to March 2009 by 16% from 254 to 294 funds.[310] In Switzerland 93 funds were available by June 2009, of which the 20 largest are included in Table 15.

TABLE 15 – TOP 20 SRI FUNDS IN SWITZERLAND BY IA

Fund name	IA CHF m, July 2009
1. SAM Sustainable Water Fund	1‘174.6
2. Pioneer Funds - Global Ecology (Activest Lux Eco Tech)	1‘020.9
3. responsAbility Global Microfinance Fund (EUR)	582.1
4. UBS (Lux) Equity Fund - Global Innovators	460.9
5. Pictet Funds (LUX) Clean Energy-P Cap	426.5
6. DWS Invest New Resources LD	328.2
7. Swisscanto (LU) Portfolio Fund Green Invest Equity A	296.9
8. Swisscanto (CH) Equity Fund Green Invest	296.7
9. Sarasin New Power Fund	289.6
10. Swisscanto (LU) Portfolio Fund Green Invest Balanced A	287.9
11. Sarasin OekoSar Portfolio	251.3
12. Sarasin OekoSar Equity - Global	250.9
13. Impax Environmental Markets (Ireland) Fund	247.3
14. Raiffeisen Futura Swiss Franc Bond	246.0
15. SAM Smart Energy Fund	239.2
16. Raiffeisen Futura Swiss Stock	234.0
17. Fortis L Fund Equity Brazil	232.9
18. New Energy Fund	211.4
19. Swisscanto (LU) Portfolio Fund Green Invest Balanced (EUR) A	198.7
20. ZKB Fonds Zinsertrag Nachhaltigkeit	180.6

Source: Sustainable Business Institute[311]

Surprisingly, in 2007 and 2008 the main SRI approach applied for SRI mutual funds was negative screening, followed by positive approaches and shareholder activism. To the extent that pooled vehicles are the preferred investment vehicles for retail and private banking clients (see Figure 17) the wide application of negative screens in this category suggests that asset managers still consider ethical considerations as a dominant motive for private investors to engage in SRI. Despite this continuous interest in negative screening, asset managers have also provided a growing share of funds that apply positive selection. Whereas the best in class

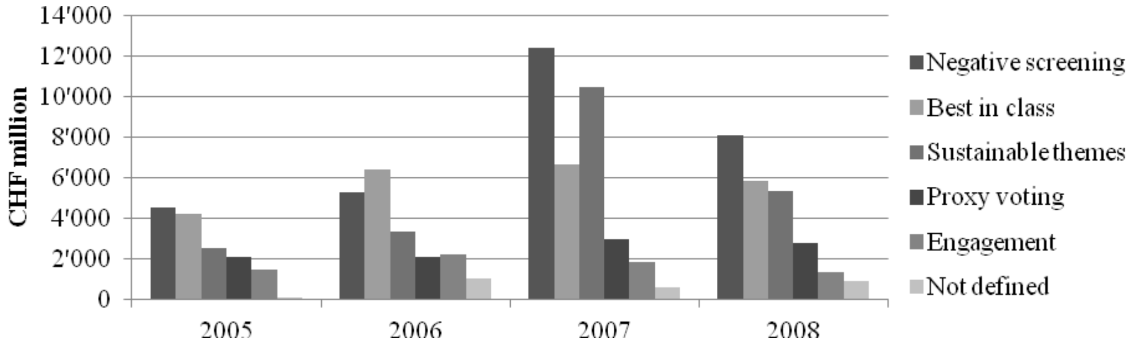
309 For the Swiss market onValues (2009, p. 8) reported the launch of a range of new products in 2008 including 14 new equity funds, 3 new strategy funds and 6 new fixed income funds.

310 See Neue Zürcher Zeitung (2009)

311 The list also includes funds provided by foreign asset managers, which are not counted in the annual onValues survey as the fund management takes place abroad (see database maintained by the Sustainable Business Institute of the European Business School www.nachhaltiges-investment.org).

offering has been remarkably stable over the years, thematic investing experienced a substantial boom in 2007, returning to lower levels again in 2008. Finally, shareholder engagement practiced by mutual funds (including proxy voting and conducting dialogue) has remained relatively stable at rather moderate levels.

FIGURE 19 – PREFERRED SRI APPROACHES FOR MUTUAL FUNDS 2005 – 2008

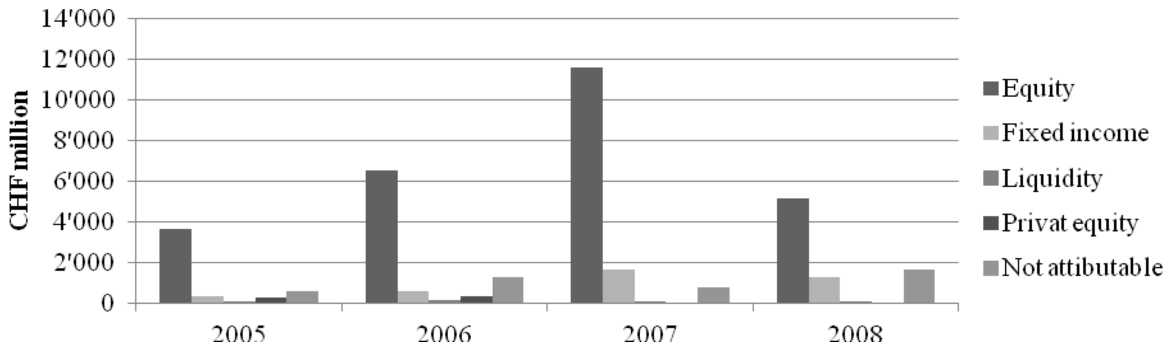


Source: Based on data from the onValues annual surveys 2006 – 2009

3.1.2.2. SRI MANDATES

Separated accounts or mandates are usually managed on behalf of institutional investors or private banking clients.[312] Similarly to pooled vehicles, the assets held in SRI mandates have grown in recent years and also experienced a severe decline in the course of the financial crisis (see Figure 16) which can also be attributed to their extensive equity bias as shown in Figure 20.

FIGURE 20 – COMPOSITION OF SRI MANDATES 2005 – 2008



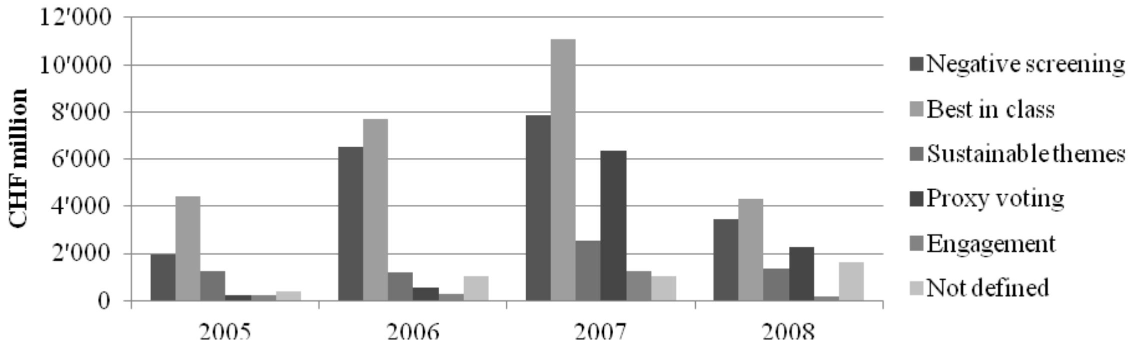
Source: Based on data from the onValues annual surveys 2006 – 2009

Contrary to SRI mutual funds where negative screening played a major role, in the case of SRI mandates best in class has been the preferred approach ahead of negative screening (see Figure 21). To the extent that products that pursue a best in class approach display similar risk and return characteristics to traditional portfolios this form of SRI seems more appropriate for

[312] Because mandates generally require a relatively high minimum initial investment personal clients tend to be high-net-worth investors, see Social Investment Forum (2008, p. 16).

fiduciary investors including pension funds.[313] This is in line with the finding that SRI mandates are predominantly held by institutional investors or HNWI unlike SRI mutual funds, which are in large part held by individual investors, (see Figure 17). Contrary to pooled vehicles, sustainable themes do not yet seem to play a major role in the case of mandate solutions, whereas demand for shareholder engagement (especially in the form of proxy voting) seems more common than in the case of mutual funds.

FIGURE 21 – PREFERRED SRI APPROACHES FOR MANDATES 2005 – 2008

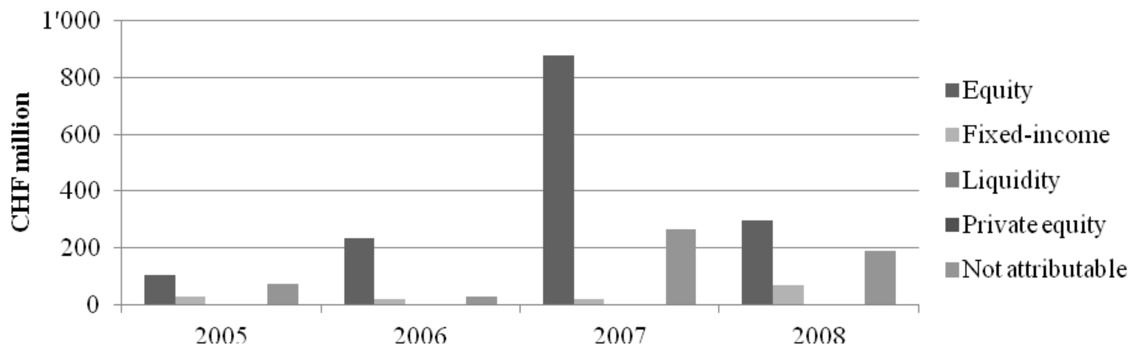


Source: Based on data from the onValues annual surveys 2006 – 2009

3.1.2.3. SRI STRUCTURED PRODUCTS

Compared to SRI mutual funds and individual mandates, SRI structured products have a rather small market share and therefore can be considered to represent only a niche in the SRI market. By the end of 2008 they accounted for only 2.7% of total SRI IA (see Figure 16). As for SRI mutual funds and mandates, SRI structured products are largely equity-based, which is why they experienced substantial corrections in the course of the financial crisis (see Figure 22). To a limited extent, fixed income solutions have emerged only in the past year.

FIGURE 22 – COMPOSITION OF SRI STRUCTURED PRODUCTS 2005 – 2008



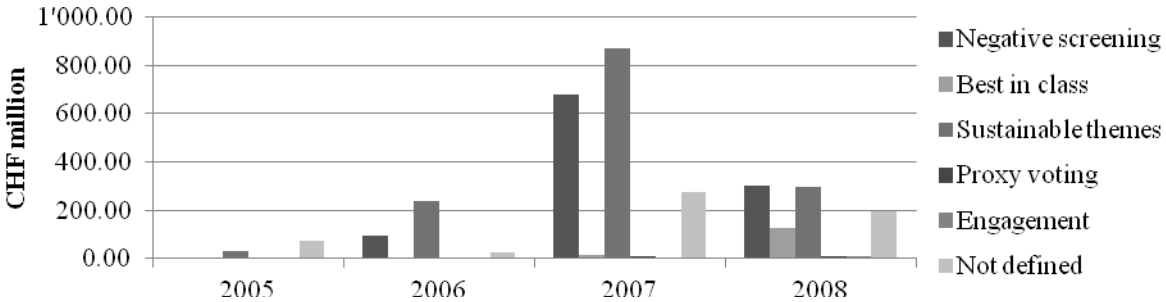
Source: Based on data from the onValues annual surveys 2006 – 2009

SRI structured products usually include a variety of baskets and certificates that have been issued on different sustainability themes such as renewable energy and water (see Figure 23).

[313] See Ambachtsheer (2006b, p. 8)

Despite recent corrections, further growth in this area can be expected due to the increased popularity of theme-based products among SRI investors.

FIGURE 23 – PREFERRED SRI APPROACHES FOR STRUCTURED PRODUCTS 2005 – 2008

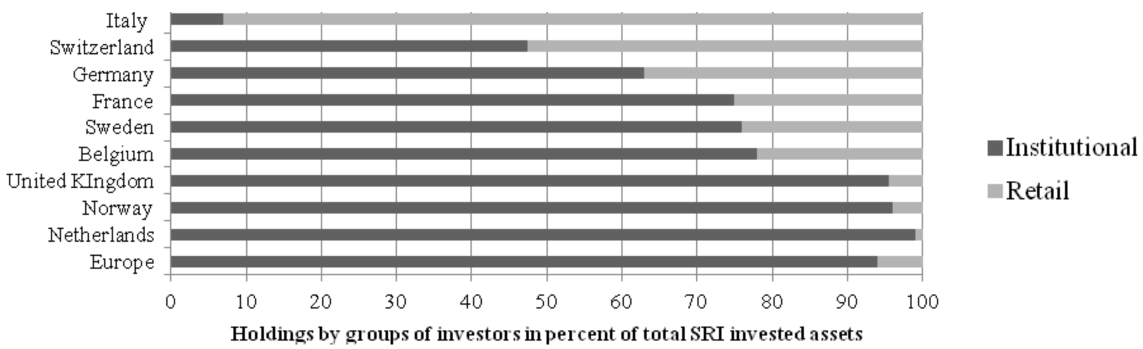


Source: Based on data from the onValues annual surveys 2006 – 2009

3.2. SRI Behavior of Swiss Pension Funds

Institutional asset owners dominate most SRI markets, whereas retail and private banking clients usually play only a minor role. As shown in Figure 24, this holds for most European countries, where on average 94% of SRI IA can be attributed to institutional investors and only 6% to retail investors. It is also true for other markets such as the U.S.[314], Australia[315] and Canada[316]. In contrast in Italy[317] and Japan[318] the market for SRI is largely dominated by retail investors. In Switzerland, demand for SRI is more evenly balanced between these two groups of investors, with retail investors accounting for 51% of the total SRI market compared to 49% for institutional investors.[319]

FIGURE 24 – SRI HOLDINGS BY INSTITUTIONAL & RETAIL INVESTORS IN EUROPE



Source: Eurosif (2008, p. 14)

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[314] See Social Investment Forum (2008)

[315] See Responsible Investment Association Australasia (2008, p. 11)

[316] See Social Investment Organization (2009, p. 10)

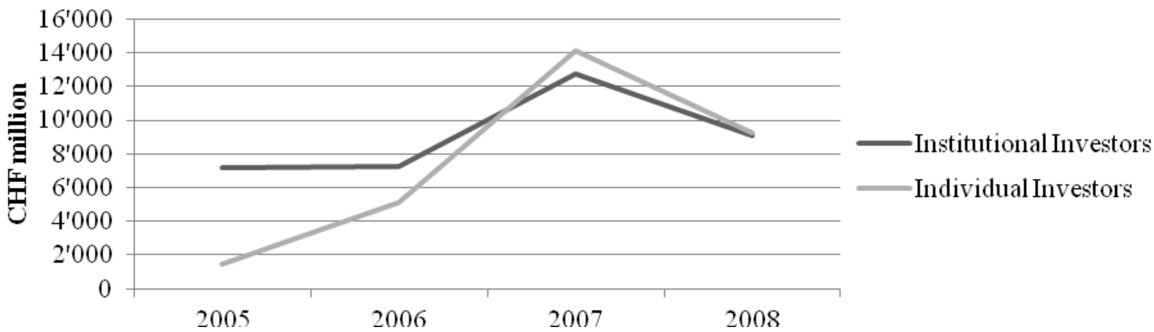
[317] According to Eurosif (2008, p. 33) the prevalence of the retail component, as opposed to the institutional one is mainly due to the relatively recent start of the pension system. Signori (2009, p. 160) expects a significant increase in SRI among pension funds due to the recent reform of legislation.

[318] Although no exact figures exist, the presence of institutional investors in the Japanese SRI market is relatively small. In 2007 the total SRI market was estimated at ¥ 840 billion of which ¥ 747 billion was in retailed SRI mutual funds (Social Investment Forum Japan, 2007, pp. 13-17).

[319] See Eurosif (2008, p. 45)

The data for the Swiss market shows that prior to 2007, SRI holdings by institutional investors outstripped those of individual investors. It was only in 2007 that individual investors surpassed institutional investors (see Figure 25). According to onValues, the increase in IA by individual investors results from the growing demand of HNWI investors and the increased effort by providers of SRI products to market such products among individual investors.[320] In particular the growing demand for theme-based products that are accompanied with an easy to sell story (e.g. on climate change) attracted a significant number of clients in the period from 2006 to 2007 (see evolution of sustainable themes in Figure 19). To the extent that such theme-based products often involve above average risk profiles they declined again disproportionately in the course of the recent crisis.[321]

FIGURE 25 – SHARE OF INSTITUTIONAL AND RETAIL SRI INVESTORS



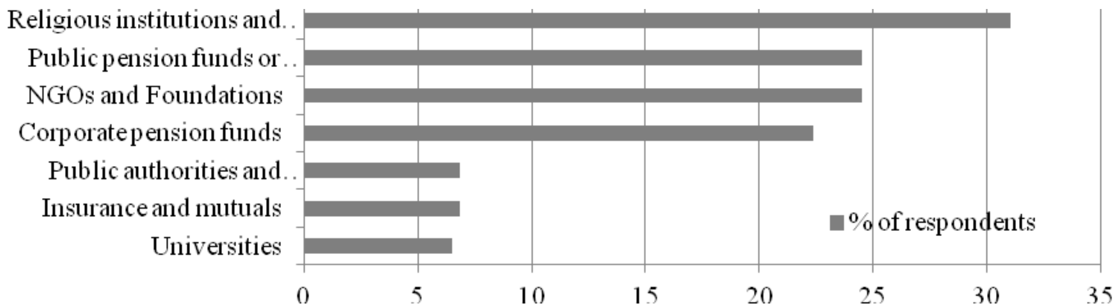
Source: Based on data from the onValues annual surveys 2006 – 2009

Pension funds play a key role within the group of institutional SRI investors. In its 2006 report, Eurosif writes that in Switzerland public pension funds and the reserve fund of the Federal old-age insurance (AHV) are the most prominent institutional SRI investors. According to the report, almost 80% of the asset managers active in the SRI market segment carry out investments for this client segment. The second largest investor group includes NGOs and foundations, followed by corporate pension funds, churches and insurance companies.[322] In the wider European context the picture differs slightly, as shown in Figure 26. Here religious institutions and charities are the main source of institutional SRI investments, followed by public pension funds or reserve funds, NGOs, foundations and corporate pension funds.[323] There is abundant evidence that pension funds have been the driving force for SRI not only in different European markets, but also in the U.S., Australia or Canada. For example, the Netherlands is considered to be the leading SRI market mainly due to the presence of PGGM (Pension Fund for Health, Mental and Social Interests) or ABP.[324] Other high profile pension

[320] See onValues (2008, p. 8)
[321] See onValues (2009, p. 6)
[322] Eurosif (2006, pp. 33-34)
[323] See Eurosif (2008, p. 14). This ranking by Eurosif is representative of the main type of investors involved, and not necessarily of the volume of SRI assets they represent.
[324] Eurosif (2006, p. 5)

funds dominating their respective SRI markets include FRR or the Etablissement de Retraite Additionnelle de la Fonction Publique (ERAFP) in France, the Universities Superannuation Scheme (USS) or the Environment Agency in the U.K., the AP1-4 pension funds in Sweden, NGPF in Norway[325], or CalPERS, CalSTRS and TIAA-CREF in the U.S.

FIGURE 26 – TYPES OF INSTITUTIONAL SRI INVESTORS ENGAGING IN SRI IN EUROPE



Source: Eurosif (2008, p. 15)

3.2.1.1. Number of Pension Funds Engaging in SRI

Reviewing the Swisscanto data for the period of 2002 to 2008 shows that in Switzerland most pension funds do not take into account environmental, social or ethical considerations in their investment decisions. According to the official data, the total number of funds that reported investing in SRI increased from only 18 funds in 2002 to 34 in 2008, with a peak of 45 funds in 2005 (see Table 27). For 2008, Swisscanto reports that out of 265 pension funds only 34 pension funds invest in SRI, which represents 12.8% of the total.[326] This number is based on the answer to the standard question on SRI asking for the percentage share of the portfolio invested in SRI, which has been included in each survey instrument from 2002 onwards.[327] A more detailed review of the responses that have been provided to the separate SRI section included in the 2008 survey leads however to different and more encouraging results. All in all we found 81 pension funds that report to engage in SRI in one or another way, of which 48 did not provide any response to the standard question in the 2008 survey (see 2008(2) in Figure 27). In total this corresponds to 30.6% of all funds included in the sample. As this figure is considerably higher than the figure officially reported, there seems to be a substantial bias in this data from which it can be assumed that the estimated number of unreported cases in the past has also been considerably higher.[328]

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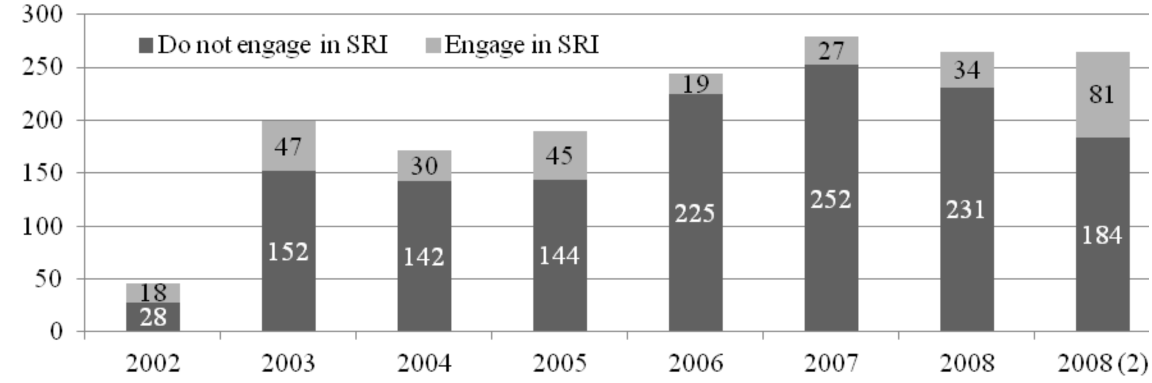
[325] According to Clark and Monk (2009, p. 1), the Norwegian Government Pension Fund is not a traditional pension fund in the sense that it has designated beneficiaries with clearly defined retirement obligations but should rather be considered as a sovereign wealth fund instead.

[326] Swisscanto (2009, p. 44)

[327] For the SPFS 2008 this corresponds to question 13.22, see section 8.1.

[328] This figure is used as a response variable in the analysis of the relationships between pension fund characteristics and their SRI behavior (see section 5.3.1).

FIGURE 27 – NUMBER OF SWISS PENSION FUNDS ENGAGING IN SRI



Source: Based on data from the Swisscanto pension fund surveys 2003 – 2008

3.2.1.2. TOTAL SRI INVESTED ASSETS

Of the 81 funds that reported investing in SRI, 53 funds provided details on the share of their portfolio invested according to SRI criteria.[329] In total these assets add up to approximately CHF 55 billion, which would mean that ca 32% of the total pension fund assets would be invested according to SRI criteria. A sound note of caution is necessary here as two of the largest pension funds participating in the survey claimed to invest their whole portfolio according to SRI criteria while failing to provide sufficient evidence for this in either the detailed section of the questionnaire, on their websites or in their annual reports. This suggests that these funds either considerably overstate their SRI engagement or they have misinterpreted the survey question and consider the 'sustainable' management of pension assets to be synonymous with socially responsible investments. Dropping these two funds leads to a considerably lower, but also more reasonable figure of approx. CHF 18 billion, which would also be more in line with the supplier-based figure generated in section 3.1.[330]

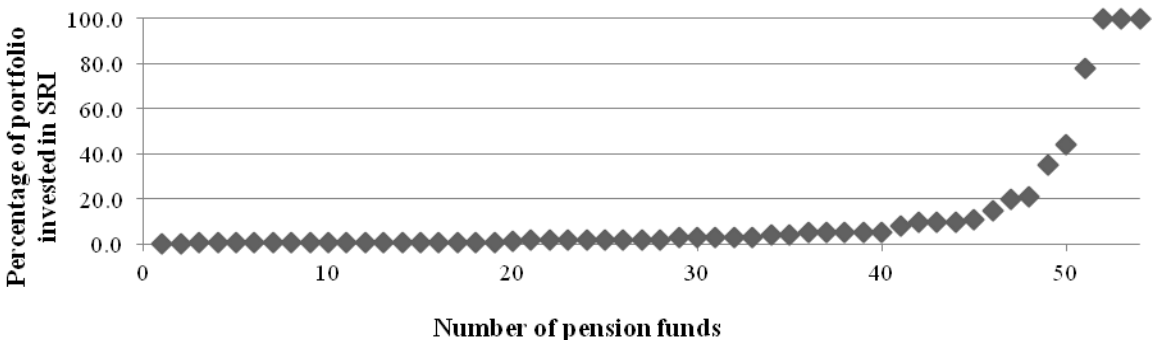
Among these 53 funds different levels of SRI integration exist. Most funds allocate only a very small proportion of their portfolio to SRI (see Figure 28), which shows that SRI is not interpreted as an all or nothing undertaking. In most cases, SRI is implemented only at the level of a single SRI product such as a best in class or thematic investment fund. Examples of funds that apply a comprehensive SRI strategy across all asset classes, such as the pension fund of the Canton of Geneva (CIA) or collective funds such as Abendrot or NEST (neither of which are part of the sample) are still the exception rather than the rule. The reluctance to allocate a larger share of the portfolio to SRI is consistent with the general practice of individual investors that according to Brown tend to hold only a minor part of their assets in

[329] This includes the 43 funds that have responded to the standard question and 10 additional funds that have provided information to a related question in the SRI part of the questionnaire.

[330] As shown in section 3.1, the total SRI invested assets held by asset managers located in Switzerland account for about CHF 34 billion, of which about half are held by institutional investors.

SRI.[331] Despite the low number of funds that engage in a comprehensive SRI strategy, 11 funds support the view that SRI criteria should be applied to the whole portfolio and across all asset classes, 32 funds disagree with this and 38 funds have no opinion.

FIGURE 28 – PERCENTAGE OF PENSION FUND PORTFOLIO INVESTED IN SRI

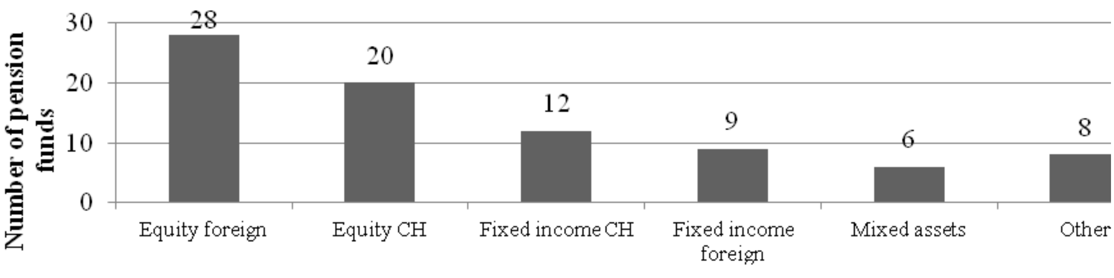


Source: Based on data from the Swisscanto pension fund survey 2008 (n = 54)

3.2.1.3. Preferred Asset Classes

Swiss pension funds traditionally focus their investment strategies on bonds and equities. By the end of 2007, the FSO reported that debt instruments were the largest asset class, accounting for up to 37% of the funds' IA followed by equities, which accounted for only 27.8%.[332] In the SRI domain the situation is the opposite. As depicted in Figure 29, most of the 42 pension funds which report on their asset allocation indicate that they invest in equities followed by fixed income. Thus, as already earlier, SRI is almost entirely equity or fixed income based. However, there is anecdotal evidence that during recent years and in line with the general attempt to diversify their portfolios, Swiss pension funds have also moved to other asset classes such as real estate or alternative assets. Although there is little evidence for this move in the Swisscanto data, there are some notable cases reported on the funds' websites or in their annual reports.

FIGURE 29 – PREFERRED ASSET CLASSES AMONG SWISS PENSION FUNDS



Source: Based on data from the Swisscanto pension fund survey 2008 (n = 42)

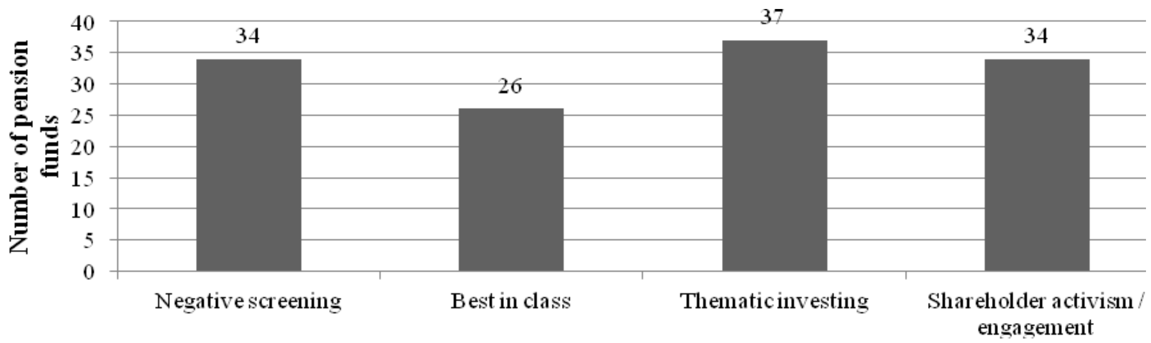
[331] Brown (2007, p. 13) cites a survey by Friends Provident from 2001, which showed that 51% of individual SRI fund holders had less than a quarter of their money invested in SRI, and only 12% have more than 75% of their money invested in SRI.

[332] See Federal Statistical Office (2009, p. 16)

3.2.1.4. Preferred SRI Approaches

Figure 30 reveals that among the 66 funds that provide details on their SRI strategy, thematic investment is the most commonly applied SRI approach (37 funds) followed by negative screening and shareholder engagement (34 funds each). The best in class approach, although less frequently used, is still important and used by 26 pension funds. ESG integration and community investment have not been considered by the Swisscanto questionnaire as they are not typically considered by Swiss SRI investors. 14 funds do not disclose any details on their preferred SRI technique. The majority of the funds (45) report that they apply a combination of two or more approaches. In contrast, 23 funds focus their SRI strategy on a single approach. Among them, 9 funds invest exclusively in thematic products, while another 6 funds apply different sets of exclusions.

FIGURE 30 – PREFERRED SRI APPROACH AMONG SWISS PENSION FUNDS



Source: Based on data from the Swisscanto pension fund survey 2008 (n= 66)

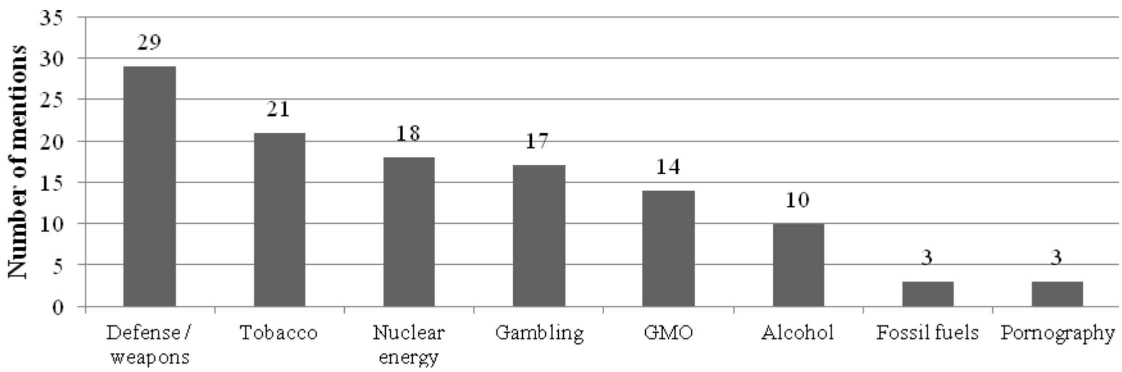
Thematic investing, which has started to play a role only recently, appears to be the most popular SRI strategy. It was named by 57.8% of all funds in the sub-sample suggesting that there is considerable awareness by pension funds of issues such as climate change, renewable energy or water scarcity.[333] The ongoing need for diversification is expected to lead to more thematic investments by pension funds in the future. However, to the extent that thematic investments tend to involve higher risks, investors usually allocate only a small part of their assets to such products. Thus although many funds indicate investment in thematic investments, they probably attribute only a minor fraction to this category. This would also explain a seemingly contradictory finding by onValues, which concluded that in terms of total IA institutional investors are rather hesitant to engage in thematic investment, whereas it has been more popular among retail and private banking clients.[334]

[333] This corresponds with earlier results from an asset manager survey, where 53% of the asset owners are mostly interested in thematic funds (see Responsible Investment (2008, p. 14)).

[334] According to onValues (2008, p. 11) sustainable themes gained ground in 2007 especially in SRI mutual funds (see Figure 19) and structured products (d products among SRI investors.
Figure 23), which were mainly held by retail and private banking clients and played a minor role for mandate solutions (see Figure 21).

Second, 34 funds apply one or more negative criteria to exclude companies and whole sectors from their portfolio, despite the fact that such values-driven exclusions bear a heightened risk of underperformance (see 0). As shown in Figure 31, the most prominent exclusions include screens concerning controversial weapons industries[335] and arms manufacturers (29 funds), followed by restrictions on tobacco (21) and nuclear energy (18). A possible explanation for the strong interest in such exclusions is that avoidance is a relatively straightforward approach that can be more easily implemented and monitored at lower costs than other SRI techniques.[336] On the other hand, a considerable challenge for pension funds applying exclusion strategies refers to the question of who decides which screens are relevant and on what basis (see also section 4.1.1). In this context Sethi comments that it is inappropriate for pension funds to use such screens for selecting or rejecting individual companies as they usually reflect the beliefs or social values of small minorities. In the context of a large pool of beneficiaries it is however likely that both individuals who subscribe to these screens, as well individuals that are adamantly opposed to them are included.[337] While certain funds apply such exclusion strategies with the objective of avoiding certain companies, it is fair to assume that the funds that do not apply such strategies are very likely to hold stocks in their portfolio that would be considered as sin stocks by a large number of their beneficiaries. However, to the extent that pension funds in Switzerland do not provide any transparency on their individual holdings, there is little accountability towards the beneficiaries on this issue. This holds also for other countries. The composition of a fund's stock ownership is seldom exposed to public scrutiny (see section 6.2.3.3).

FIGURE 31 – PREFERRED NEGATIVE SCREENS



Source: Based on data from the Swisscanto pension fund survey 2008 (n = 34)

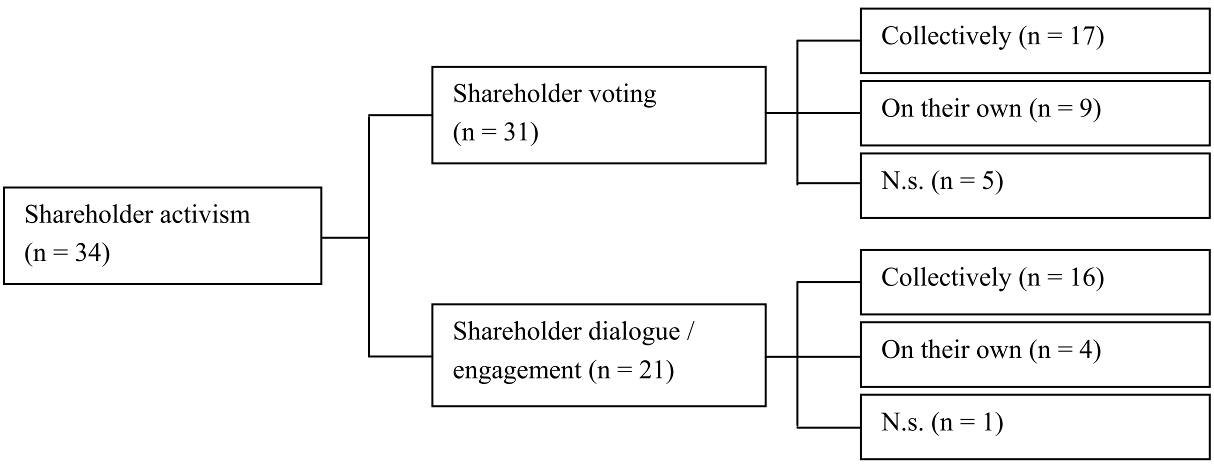
[335] The screens date prior to the signature of the Oslo Convention by the Swiss government which prohibits the use, transfer or stockpile of cluster bombs. The ratification of the convention by the Swiss parliament may lead to increased application of such screens among Swiss pension funds.

[336] See Luther et al. (1992, p. 60)

[337] Sethi (2005, p. 108). Kolb (2007, p. xiii) illustrates this by referring to the example of the pharmaceutical sector, writing that "some pension funds may be withheld from pharmaceutical firms that manufacture contraceptives, and such a policy is sure to annoy some fund beneficiaries, just as the decision to invest in such a firm would irritate other beneficiaries covered by the plan."

Shareholder engagement on environmental, social and governance issues is also popular (34 funds). As outlined in section 2.3.4 one can distinguish between different forms of shareholder engagement, such as conducting dialogue with the management, proxy voting or filing or co-filing of shareholder resolutions. The Swiss Pension Act introduced in 2002 requires Swiss pension funds to define the rules that they apply in the exercise of their shareholders' rights, which at the end of the day requires them simply to disclose if they have a policy directed at the exercise of shareholder rights or not.[338] Although this is only a disclosure requirement and not a requirement to effectively have a voting policy in place, one could expect that this had a positive impact on the voting practices of Swiss pension funds in the past, particularly with regard to corporate governance issues. As shown in Figure 32, out of the 34 funds practicing shareholder engagement, 31 funds exercise their voting rights while 21 funds conduct direct dialogue with the company management. 18 funds pursue both approaches in combination. Furthermore, there is a strong preference towards collaborative activism to engage more effectively with the companies and eventually benefit from shared costs. An important forum for such collective forms of shareholder engagement in Switzerland has been initiated by Ethos in 2004.[339] In the name of its members, the pool engages in direct dialogue with the management of Swiss companies on material ESG issues with the aim of enhancing long-term shareholder value for their beneficiaries. The costs for the engagement activities are fully borne by the members of the pool in proportion to their holdings in Swiss companies. Pool members choose the engagement topics annually. For 2009, the pool has focused not only on improving corporate governance practices (e.g. executive remuneration), but also on environmental and social concerns (e.g. sustainability reporting, codes of conduct and corporate principles, reporting on corporate strategy relating to climate change and CR along the supply chain).

FIGURE 32 – FORMS OF SHAREHOLDER ACTIVISM / ENGAGEMENT



Source: Based on data from the Swisscanto pension fund survey 2008 (n= 34)

338 See article 49a § 2, BVV2

339 See Ethos (n.s.) and www.ethosfund.ch/e/products-services/ethos-dialogue.asp

Best in class selection ranks only fourth (26 funds) among the SRI techniques most often selected by the pension funds. At first sight this is surprising as contrary to negative screening, this approach does not rule out specific sectors and has therefore displayed risk and return characteristics similar to those of traditional actively managed products, making it more applicable for fiduciary investors including pension funds. A fund that applies such a best-in-class strategy is the pension fund of the City of Lucerne, which is a public fund with CHF 1.14 billion IA and slightly more than 4'600 beneficiaries at the end of 2007. In 2007, the fund reports to have broadened its existing SRI strategy by investing CHF 27.14 million in Sarasin Sustainable Equities Global mutual fund (2.4% of its portfolio). This best in class fund invests in companies on the assumption that companies performing well with regard to environmental and social criteria will also outperform financially.

4. DETERMINANTS OF THE SRI BEHAVIOR OF SWISS PENSION FUNDS

The analysis in the previous sections showed that the SRI behavior of Swiss pension funds is very diverse. Out of the 249 funds included in our sample 168 funds report not to engage in SRI, whereas 81 funds show a positive attitude towards SRI.[340] Among the latter, the SRI behavior varies considerably, ranging from satellite investing in thematic SRI products with the primary objective of benefitting from the growth trend in this market, to the exercise of shareholder engagement in order to impact firm behavior on specific SRI related issues and to the more traditional application of negative screens to meet the normative expectations of their beneficiaries. This variety is also reflected in other areas of pension fund management such as the general investment policies of the funds, their institutional set-up or the level of benefits and contributions they provide to their beneficiaries, etc. According to Queisser and Vittas, a main reason for this variety in the Swiss system is that the Federal Law on Occupational Old-age, Survivors' and Disability Benefit Plans (BVG) imposes only minimum legal requirements, leaving most of the terms and conditions and operational elements of pension funds to be determined by the pension funds themselves.[341]

In the SRI context, there has been little systematic attention placed on the question of why some pension funds act as SRI investors while others do not. To better understand the reasoning for this, the following sections try to explore empirically to what extent the SRI behavior of pension funds can be explained by referring to specific pension fund characteristics. That is, we summarize a number of propositions that specify the conditions under which pension funds are more likely to engage in SRI. We therefore challenge conventional wisdom that pension funds are a homogeneous group of investors. For example, Monks and Minow write that "pension funds have many of the qualities necessary to play [the] role [of the perfect owner]. Their ownership, by virtue of their size and their time horizons, is as close to permanent as possible. And because of this near-permanent stake, their interest should be far-sighted enough to incorporate the long-term interests of the corporation and (as an essential element of those interests) the interests of the employees, customers, suppliers, and the community."[342] Although this level of generalization may be somewhat misleading for pension funds as a whole, one can argue that those funds that engage in SRI indeed share several common characteristics some of which can specifically be attributed to pension funds, while others may also hold for other institutional investors.

In order to get an understanding of these characteristics, we propose an analytical framework in which the relationships between these characteristics and the SRI behavior of the funds are explored. To the extent that there is no comprehensive theoretical model available that explains the SRI behavior of pension funds, we reference different strands of literature, such as stakeholder and agency theories, theories of investor types, ethical consumer behavior or

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[340] For a list of the participating pension funds see section 8.2.
[341] Queisser, Vittas (2000, p. 29)
[342] Monks, Minow (2001, p. 154)

demographic profiling. Also, we recall the work of Gasper and Schweig, Ryan and Schneider, Schumacher-Hummel, Cumming and Johan, Williams and Nilsson that identified mechanisms of SRI decision making by investors.[343] Based on their preliminary research, we propose three sets of characteristics that are related to a fund's investment decision process and that we believe offer the greatest explanatory power to distinguish between pension funds that engage in SRI and those that do not. First, in section 4.1 we explore the influence of different stakeholders on the SRI behavior of pension funds. In section 4.2 we analyze how specific portfolio characteristics affect the capacity of a fund to engage in SRI, and finally section 4.3 assesses the role of a number of institutional characteristics. In the following subsections, each characteristic is analyzed in relation to the potential SRI behavior of a pension fund, followed by a short review and synthesis of the existing literature and concluding with the formulation of testable hypotheses. This way the chapter forms the background to the empirical analysis in chapter 5, where we introduce the data from a 2008 survey of Swiss pension funds, the methodology and the variables used for testing the hypotheses, followed by an overview of the results alongside summary statistics. In chapter 6 we present a discussion of the results.

4.1. Stakeholder Characteristics

A first set of determinants that may influence whether a pension fund engages in SRI or not concerns the disposition of different pension fund stakeholders towards this form of investing.[344] As shown in Figure 33, a variety of stakeholders exist both within (e.g. the central governing body of the fund, the management or the internal committees) and outside a pension fund (e.g. the fund's sponsoring entities, service providers, regulatory and supervisory authorities, auditors as well as the companies in which the funds are ultimately invested in). In the following sections we will place special focus on those stakeholders who are supposed to have a stake in the investment decision making of a fund and hence may also influence a pension fund to engage in SRI.

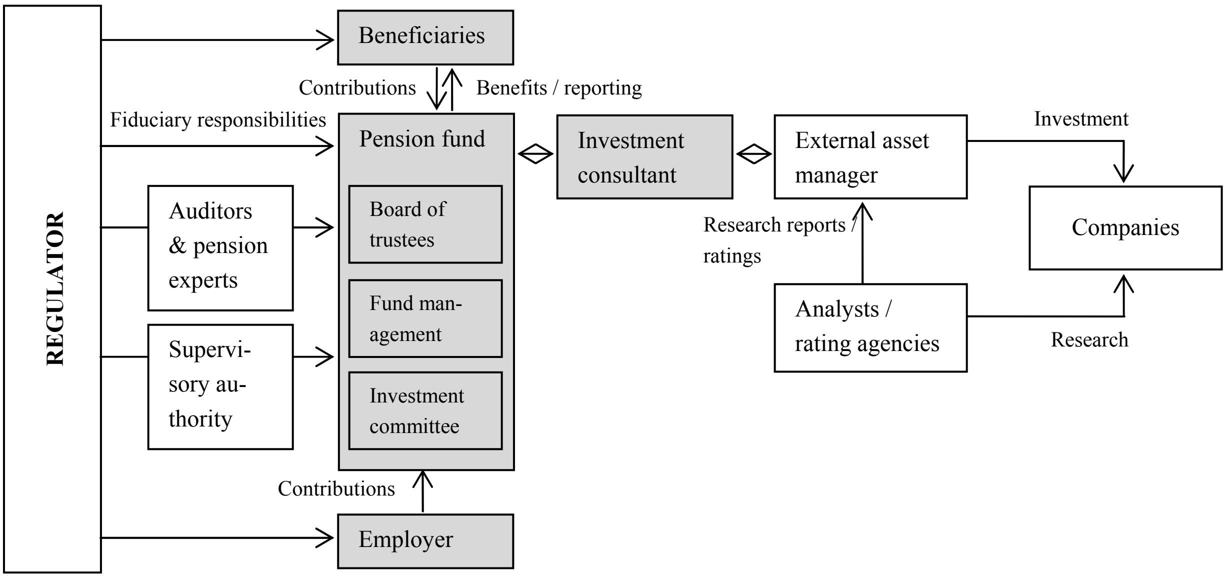
First, in section 4.1.1 we examine the role of the central governing body that determines a fund's investment strategy and interacts with the management of the fund and the members of the investment committee. Second, we explore the role of external stakeholders such as the employer (see section 4.1.2) and the beneficiaries of a fund (see section 4.1.3) that both provide the financing of the retirement obligations. Finally, investment consultants (see section 4.1.4) that act as an entry gate for external asset managers may either facilitate or impede an SRI engagement of the fund through their advice. As shown in Figure 33, other stakeholders exist such as supervisory authorities, auditors, or pension fund experts who support the governing body of a pension fund, but whose role in the investment decision process is rather limited and can therefore be ignored. The role of the regulators is not considered because in

[343] See Gasper, Schweig (1985), Ryan, Schneider (2002), Schumacher-Hummel (2004), Cumming, Johan (2007), Williams (2007), Nilsson (2008)

[344] Clarkson (1995, p. 106) defines stakeholders as persons or groups that have, or claim, ownership, rights, or interests in a corporation and its activities, past, present or future.

Switzerland there is no regulation which promotes the integration of SRI into a fund's investment or ownership decisions. The question whether the reliance on external asset managers has an impact on the SRI behavior of a pension fund will be examined under institutional characteristics in section 4.3.1.

FIGURE 33 – STAKEHOLDERS OF PENSION FUNDS



Source: Based on Who Cares Wins Initiative (2009, p. 8), Knight, Dixon (2009, p. 11)

4.1.1. The Board of Trustees

In Switzerland pension funds either take the form of private institutions (foundations or cooperative societies) or an institution incorporated under public law[345], of which foundations are by far the most common organizational form. In the case of foundations, the pension fund board of trustees is the central governing body.[346] The board is responsible for jointly managing and overseeing the fund's assets.[347] As such it has to formulate the fund's investment policy and monitor and guide the management of the assets in line with the market. In particular, it has to define the objectives and guiding principles for the asset management and to establish the organizational set up and processes for the adequate management of the pension fund assets. It also defines the principles which govern the exercise of the fund's voting rights in the companies in which the pension fund is invested.[348] In this role the central governing body can delegate certain actions or functions to the management of the fund or to respective subcommittees, the ultimate responsibility however cannot be delegated and always remains with the central governing body.[349] To the extent that board members are usually only part-time

[345] See article 48, § 2, BVG and article 331, § 1, OR. Only funds of federal, cantonal or communal institutions or public employers can be incorporated under public law.

[346] For cooperative societies the highest organ is the assembly of delegates which elects the board of the pension fund. See Konrad (2009, p. 126).

[347] See article 51 § 1 and 2, article 53a and 71 § 1, BVG and article 49a § 1, BVV2. See Frauenlob (1998, p. 206), Sigg et al. (2005, p. 21), Queisser, Vittas (2000, p. 35).

[348] See article 49a § 2, BVV2

[349] See Vetter-Scheiber (2009, p. 218), Ammann, Zingg (2008a, p. 5), Konrad (2009, p. 127)

and sometimes not even elected on the basis of their professional qualifications, they may rely on additional internal pension fund capabilities or external advisers to assist them in making fully informed decisions.[350] Other internal organs that may play a role in the investment decision-making process include the pension fund management which is in charge or the day-to-day operational management of the fund and the investment committee.[351] Regarding the former Sigg et al. write that the influence of the fund management on the investment process largely depends on whether it is actually part of the investment committee or not.[352] The investment committee is usually composed of members of the governing body and may also include representatives from the pension fund management as well as external experts.[353] Although there are no regulatory requirements regarding the role of the investment committee, Ammann and Zingg suggest that it should first and foremost be in charge of selecting external asset managers or deciding on tactical asset allocation.[354]

Due to this central role, the disposition of pension fund trustees regarding SRI is crucial to whether a pension fund engages in SRI or not (see section 4.1.1.1). Second, we suggest that the composition of the board may also have an influence on the propensity of a fund to engage in SRI. More specifically based on a set of literature which examines the behavior of individuals regarding SRI, we hypothesize that the socio-demographic characteristics of the trustees influence the SRI behavior of a fund (see section 4.1.1.2). Finally, in section 4.1.1.3 we argue that the size of the boards may impact the decision to promote SRI as an investment option as a larger group of trustees within a board may distract trustees from promoting SRI as an investment option.

4.1.1.1. Financial Perception of SRI

According to modern portfolio theory, under efficient market conditions rational investors are only concerned with expected return and risk characteristics when constructing optimal investment portfolios and should be indifferent to any non-financial factors.[355] As shown in section 2.4, we expect this view to hold among pension fund trustees that invest the retirement capital of their beneficiaries as fiduciaries. Article 71 of the BVG requests pension fund trustees to manage assets prudently to "ensure the security of assets, achieve a reasonable return on investments, maintain a suitable diversification of risks, and allow for the liquidity requirements of the plan".[356] As such it could be argued that they are expected to maximize the financial returns of their investments at a specified level of risk to finance pension obligations.[357] As a consequence, their perception of an investment in terms of financial perform-

[350] See Bingham (2008)
[351] See Frauenlob (1998, p. 207)
[352] Sigg et al. (2005, p. 22)
[353] For example the investment committee of the public pension fund of the Canton of Grisons includes also representatives of external investment consultants.
[354] Ammann, Zingg (2008a, p. 7)
[355] See Markowitz (1952)
[356] See article 71, BVG. In addition, articles 49-60, BVV2. See Frauenlob (1998, pp. 64-65).
[357] See Boasson et al. (2004, p. 56)

ance and risk involved is likely to influence their perception of an investment opportunity. Obviously, this should apply to SRI, meaning that the likelihood that a pension fund engages in SRI is a function of the trustees' perception of SRI in terms of risk-adjusted return.[358] That is, the propensity of a pension fund to invest in SRI is expected to increase or decrease depending on a trustee's perception of the performance of SRI.[359] To the extent that pension fund trustees differ substantially with regard to their perception of SRI and because their fiduciary duties outlined in section 2.4 require them act as a rational economic investor, we hypothesize that:

H1.1 A positive perception of pension fund trustees regarding SRI in terms of long-term performance will positively impact the SRI behavior[360] of the pension fund.

H1.2 A negative perception of pension fund trustees regarding costs resulting from SRI will negatively impact the SRI behavior of the pension fund.

H1.3 A negative perception of pension fund trustees regarding risk levels resulting from SRI will negatively impact the SRI behavior of the pension fund.

4.1.1.2. Board Demographics

Different studies suggest that individuals that engage in SRI differ from other conventional investors in a number of socio-demographic characteristics.[361] Typically, this includes characteristics such as education, age, gender, income level or personal lifestyle.[362] Although the results of these studies are in part inconclusive and sometimes contradictory, limiting them to general findings[363], they are widely used as segmentation criteria within the consumer and financial industries.[364] In the following sections we will explore potential relationships between personal characteristics of board members and the SRI behavior of their pension fund. Although there is relatively little information available on the composition and diversity of

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[358] See Schumacher-Hummel (2004, p. 197), Cumming, Johan (2007, p. 412), Williams (2007, p. 48).

[359] See Nilsson (2008, p. 312). See also Ambachtsheer (2006a) who showed in a survey among U.S. institutional investors that roughly 60% agree that the belief that SRI helps reducing risks and improve returns is an important driver among trustees. This is consistent with findings that many pension trustees still refuse SRI on the basis that the inclusion of SRI criteria necessarily hurts financial performance or increases risks (see Kinder (2004a, p. 15)). Mills et al. (2001, p. 31) show that a main explanation why environmental information does not feature in investment decision-making among Australian investment professionals lies in the negative perceptions of the relationship between environmental and financial performance and the absence of reliable information on environmental performance.

[360] SRI behavior is used as a response variable and is defined in section 5.3.1.

[361] See Rosen et al. (1991), Harrison (1995), Beal, Goyen (1998), Lewis, Mackenzie (2000a), Tippet, Leung (2001), McLachlan, Gardner (2004), Williams (2007), Nilsson (2008)

[362] According to Brown (2007, p. 15) ethical investors are educated, conscientious individuals with a higher degree of financial literacy and above-average income. Research by Rosen et al. (1991) and Green (2001) suggest that compared to conventional investors, socially responsible investors tend to be younger with higher levels of education.

[363] Differences may depend on data quality, sample size, varying research designs, the regional focus of the studies or the date when the studies have been conducted.

[364] See Nilsson (2008, p. 312)

Swiss pension fund boards, anecdotal evidence suggests that they represent a rather homogenous group of middle-aged or older men who do not typically correspond to the profile of the average SRI investor identified by these socio-demographic studies.

A first demographic characteristic relates to the level of qualifications of board members and how this relates to their inclination to engage in SRI. In Switzerland there is no explicit requirement by law regarding the level of education or financial and investment background of pension fund trustees, although the complexity of their task has certainly increased in recent years.[365] However, some funds do select their board members on the basis of their professional qualifications.[366] The term 'professional qualification' is not defined in more detail, but may involve competencies from different disciplines such as law, finance, actuarial mathematics, business administration and others. In cases the capabilities of board members are limited, article 51, paragraph 6 of the BVG requires representatives of the pension fund board to seek to enhance their knowledge via appropriate training in order to be up to their role as trustees.[367] Surveys of individual SRI investors consistently find that compared to other conventional investors SRI investors tend to have higher levels of education.[368] For example, Rosen et al. conclude that SRI investors are better educated than investors in conventional mutual funds, with 60% of the former having a graduate degree compared with 22% for the latter.[369] Similarly, Nilsson shows that education proved to be a significant predictor of SRI investment behavior, as individuals without a university degree invested less in SRI.[370] From this Schueth concludes that growth in demand for SRI results from investors being much better educated and informed today than in the past.[371] In particular, as SRI is an issue that is fraught with considerable prejudice and considered as a complex field requiring specific capabilities and know-how to process ethical, environmental or social information, a higher level of education seems beneficial.[372] McLachlan and Gardner add that better educated individuals might be "better informed about and hence more influenced by issues of social responsibility when they invest"[373]. Diamantopoulos et al., who have reviewed a large number of studies on the impact of education on environmental consciousness, show that these findings are relatively consistent, proposing a significant positive relationship between the level of education and the propensity to invest according to SRI criteria. From this they hypothesize that better educated investors understand the issues involved more fully and are also more

[365] See Ammann, Zingg (2008a, p. 5)
[366] According to Burkhard (2007, p. 31) such funds have outperformed financially in the past.
[367] See Konrad (2009, p. 136)
[368] See Rosen et al. (1991), Tippet, Leung (2001), Beal, Goyen (1998, p. 141), Brown (2007, p. 13)
[369] Rosen et al. (1991, p. 226)
[370] See Nilsson (2008, p. 319)
[371] See Schueth (2003, p. 192)
[372] For example Maloney et al. (1975) argue that "the very nature of ecology with its complex interactions between organisms and environment serves to make its subject matter difficult to understand and assimilate" (see Diamantopoulos et al. (2003, p. 472) suggesting that ethical consumers tend to be better educated than conventional consumers.
[373] See McLachlan, Gardner (2004, p. 20)

concerned about issues such as the environment. [374] To the extent that SRI is a non-standard investment approach for pension fund trustees, we suggest that those trustees that have the necessary professional qualification to act as trustees also have a better understanding of the underlying mechanisms of SRI. Accordingly we hypothesize that:

H2.1 Pension fund boards that are composed of members that are elected on the basis of their professional qualifications are more likely to promote SRI criteria.

A second demographic characteristic relates to the age of the trustees of a pension fund. In Switzerland, pension fund boards must be made up of employee and employer representatives in equal measure.[375] The latter may consist of representatives of the workforce or the retirees who according to Weber et al. may have different concerns as a function of their status or age. For example, whereas the employee representatives who are building up benefits in the scheme tend towards a maximum increase of wealth during the years when they contribute to their pension assets, retirees who are receiving a pension from the scheme may be primarily interested in the security of their pension savings.[376] Thus depending on their age and hence their status pension fund trustees may have varying preferences regarding their fund's investment decisions. Although little information exists on the age structure of the boards of trustees, it s fair to assume in the light of the qualifications required that they are mostly middle-aged or older individuals.[377]

In the literature on the demographic characteristics of individuals engaging in SRI, different studies have explored the relationship between the age of an investor and their SRI behavior, ending up with contradictory results. For example in a survey among 4'000 investors Rosen et al. found that SRI investors tend to be younger than other investors.[378] Within their sample the median age of individual SRI investors is 39 years compared to 52 years for conventional investors. An explanation provided by McLachlan and Gardner is that compared to older investors, younger investors tend to place environmental protection and corporate citizenship ahead of money making.[379] In another study, Lewis and Mackenzie found that SRI investors are frequently middle-aged. In their sample the majority of SRI investors examined were over 45 (68.2%) and 20% were 65 years of age or more.[380] Again others found that SRI investors

[374] See Diamantopoulos et al. (2003, p. 472)
[375] Article 51, § 1, BVG
[376] Weber et al. (2009, p. 57)
[377] According to Ryter (2007, p. 10) in 21% of the pension funds participating in the 2007 Swisscanto survey include retirees in their boards (16% are attributed with voting rights) and they account for 27% of pension fund beneficiaries.
[378] See Rosen et al. (1991).
[379] See McLachlan, Gardner (2004). According to research conducted by KPMG "80% of 25-39 year olds as compared to 72% of 40-59 year olds would consider investing ethically" (see Matterson (2000) in McLachlan, Gardner (2004, p. 12).
[380] See Lewis, Mackenzie (2000a, p. 182)

are generally older than conventional investors.[381] According to Lewis and Webley, this simply results from the fact that although young people have the most developed and positive attitudes towards social, environmental or ethical issues they lack the opportunity and the money to invest in this way.[382] Thus to the extent that younger individuals seem more aware of environmental, social or ethical issues and that pension fund trustees do not invest their own funds but those of the pension fund, we hypothesize that:

H2.2 Pension funds that include also younger representatives of the workforce in their governing body are more likely to engage in SRI.

Another demographic characteristic, which may influence the investment behavior of a pension fund, relates to gender distribution within the board of trustees. Although a significant portion of Swiss pension fund assets have been contributed by women, they make up only a small fraction of the trustees on pension fund boards. This holds also for our sample, where mainly males sit on the boards of the funds. Although according to Weber et al. the economic literature has not found a direct relationship between presence of women in boards and the performance of companies,[383] other research shows that men and women show differences in terms of their investment behavior. With regard to the SRI behavior of individual investors, various authors conclude that women are more likely to invest in SRI then men.[384] For example Nilsson reports that men have a tendency to invest a smaller proportion of their investments in SRI.[385] Similarly, Schueth estimates that roughly 60% of the SRI investors in the U.S. are women.[386] While a review of studies by Diamantopoulos et al. on the demographic characteristics of ethical consumers find that men generally have higher or better knowledge of environmental issues, women are reported to exhibit both greater concern for environmental issues and participate more frequently in various types of environmental activities such as energy conservation, recycling, or political action.[387] Applied to the behavior of SRI investors, one could suggest that women are more likely to take account of environmental, social or ethical concerns and therefore are more inclined to invest in SRI than men. From this, we hypothesize that:

H2.3 Pension funds that include a higher percentage of women in their governing body are more likely to engage in SRI.[388]

381 See Beal, Goyen (1998, p. 141), McLachlan, Gardner (2004), Brown (2007, p. 13)

382 See Lewis, Webley (1994, p. 173). See also Wall (1995, p. 297) and Diamantopoulos et al. (2003, p. 475) who suggest that younger individuals tend to be more environmentally or ethically concerned.

383 Weber et al. (2009, p. 59)

384 See Beal, Goyen (1998), Nilsson (2008), Tippet, Leung (2001)

385 Nilsson (2008, p. 319)

386 Schueth (2003, p. 192)

387 Diamantopoulos et al. (2003, p. 470)

388 See Amacker (2000)

A fourth characteristic, which is also assumed to be related to the SRI behavior of individuals concerns the level of income of investors. For example several studies conclude that SRI investors tend to have lower income levels than other conventional investors.[389] Rosen reports that individual SRI investors earn on average up to 15% less than conventional investors. While there is some consistency in these results, the authors provide varying explanations. Rosen et al. explain lower income levels of SRI investors with the fact that they are younger and therefore in earlier stage of their career. In contrast, Beal and Goyen argue that SRI investors have lower household income, but generally higher household assets than conventional investors, as they also tend to be older including many retired or semi-retired investors who have lower cash incomes, but higher levels of household assets.[390] Other sources find that SRI investors are frequently middle-income professionals[391] or that SRI investors have even higher levels of income than conventional investors.[392] Regarding the latter, one possible explanation is that individuals who invest in SRI are relatively wealthy and therefore able to bear a financial cost that is associated with some forms of SRI.[393] This finding is partly supported by the growing interest of HNWIs for SRI. For example, in a report by Merrill Lynch and Capgemini[394] the authors claim that HNWIs are increasingly conscious of social and environmental concerns and hence are looking to invest in companies and financial products that are in line with their values. According to them, HNWIs and Ultra-HNWIs play a key role when it comes to SRI as a form of philanthropic giving.

H2.4 To the extent that pension funds trustees do not invest their own money but the money of a fund's beneficiaries, we suggest that income levels of the members of pension fund boards are not related to the SRI behavior of a fund.

Finally, another hypothesis is that for SRI investors this type of investing is a continuation of their wider personal lifestyle. For example, Rosen et al. show that individual investors engaging in SRI are often activists who also engage in other cause-related activities.[395] They show that 88% of SRI investors surveyed also donate money to other cause-related groups and some 48% spend time volunteering. Similarly, Lewis and Mackenzie report that SRI investors often take an active part in political parties, religious and charitable institutions, or pressure

[389] See Rosen et al. (1991), Beal, Goyen (1998, p. 141), McLachlan, Gardner (2004)

[390] See Beal, Goyen (1998, p. 141)

[391] See Lewis, Mackenzie (2000a)

[392] According to Brown (2007, p. 13) SRI investors are likely to be affluent individuals who also have a greater willingness to purchase financial products with added ethical features, in some cases even if they have to pay more than for conventional investments.

[393] According to Brown (2007, p. 13) on average, SRI investors are from a higher income bracket, to the extent that SRI requires a greater degree of wealth and financial sophistication. To the extent that equity ownership in the U.K. is skewed towards the most affluent socio-economic group, SRI is assumed to "appeal to a greater number of well-off individuals with the interest and resources to commit to high-impact social investment".

[394] See Merrill Lynch, Capgemini (2007). High net worth individuals (HNWI) are defined as having investable assets (financial assets not including their primary residence) in excess of USD 1 million.

[395] Rosen et al. (1991, p. 228)

groups.[396] Brown further adds that SRI investors by definition have a high level of interest in social and environmental issues, and therefore seek to reflect their views in their investments.[397] Hence their investment practices are just a natural part of their way of life or lifestyle as they usually act in a cause-related manner.[398] Furthermore O'Neil and Pienta describe an ethical person as someone who is "other" centered, caring about the impact that their actions have on others,[399] rather than someone who engages in SRI to compensate for an otherwise hedonistic lifestyle[400]. Although the duty of loyalty obliges pension fund trustees to act in the best interest of the beneficiaries of a fund (which includes the avoidance of conflicts of interest or the consideration of personal values or beliefs in investment decisions) the evidence above suggests that:

H2.5 Pension fund boards that are composed of members who engage in cause-related activities or that have a high level of interest in social and / or environmental issues are more likely to engage in SRI.

4.1.1.3. Board Size

According to the Who Cares Wins (WCW) initiative, prevailing skepticism among fiduciaries regarding the non-standard investment approach associated with SRI (for many of them investing in SRI runs against conventional investment practices of pension funds) requires strong beliefs on the part of trustees to effectively promote SRI.[401] Similarly, Johnson and de Graaf expect that pension funds are often reluctant to pursue non-traditional investment strategies (with unproven track records) that although prudent are not widely used by other pension funds, for fear of exposure to liabilities arising through breaching conventional investment practices.[402] As a result of this, the WCW initiative expects that the need for demonstrable compliance and questions around compatibility with fiduciary obligations leads trustees to favor conventional approaches.[403] In this situation we hypothesize that being exposed to a larger group of decision-makers may deter trustees from promoting SRI as an investment option. Following the same line of argument, Cumming and Johan suggest that among institutional investors SRI is more common when the decision to invest in this way is centralized in

[396] Lewis, Mackenzie (2000a)
[397] Brown J. (2007, p. 13)
[398] See Rosen et al. (1991, p. 228), Lewis, Mackenzie (2000a, p. 183). In addition Lewis and Webley (1994, p. 180) showed that people with green attitudes reveal a greater enthusiasm for SRI. From this Nilsson (2008, p. 310) concludes that investors that have more involvement with the pro social issues that are addressed in SRI should be more likely to engage in SRI.
[399] O'Neil, Pienta (1994, p. 74)
[400] See Rosen et al. (1991, p. 230). Statman (2004, p. 158) concluded that unlike responsible consumer goods that benefit from signaling social responsibility to other people, SRI products mainly offer self-signaling benefits, in that investors signal their social responsibility to themselves.
[401] Who Cares Wins Initiative (2009, p. 39)
[402] Johnson, de Graaf (2009, p. 5)
[403] Who Cares Wins Initiative (2009, p. 39)

the hands of a single chief investment officer, as opposed to a broader group of individuals.[404] From this we hypothesize that:

H3 Pension funds with smaller boards are more likely to invest in SRI than funds governed by larger decision-making bodies that require more transparent decision-making.

4.1.2. Disposition of Employers

Another characteristic that may help to explain why certain funds engage in SRI while others do not, relates to the disposition of the employer towards environmental, social or ethical concerns. The question is to what extent the values of the employer impact the investment strategy of the pension fund. In Switzerland, although pension funds are legally separate from employers, employers can influence the investment decisions of a fund through their representation on the board of trustees. According to Weber et al. employee representatives have an interest in augmenting or preserving their pension assets, whereas representatives of the employer are mainly interested in avoiding making any extra contributions and in avoiding potential reputation issues that could backfire.[405] Accordingly, one can argue that employers from a more sophisticated socio-cultural background are more likely to promote SRI in the investment strategy of their pension fund. Pension funds for which this line of thinking is most straightforward include mission-based organizations such as churches, unions or other nonprofit organizations but also companies with a strong commitment to CR issues. According to the mission hypothesis formulated by Schäfer, the investment policy of such organizations is not only geared towards performance, but also towards the organization’s principles.[406] For them the coordination between the mission of the employer and the investment practices of its pension fund is ultimately a matter of the credibility of the employer’s commitment towards their mission.[407] In fact, in a study of pension funds in the U.S. the alignment with an employer’s mission was considered as the single most important driver for the offering of a SRI pension option (this holds particularly for healthcare organizations and government funds).[408]

In Switzerland, Oesch finds evidence that an employer’s mission plays a certain role for mission-based organizations, as well as organizations that have a strong affiliation with social or environmental concerns (i.e. employers from the health sector, social services, education or employers with a cultural background).[409] Although the primary objective of church or union pension funds is similar to any conventional fund and is to meet the fund’s liabilities towards their employees, they should have a special interest in doing this in a way that is consistent

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[404] Cumming, Johan (2007, pp. 396-397)

[405] See Weber et al. (2009, p. 57)

[406] Schäfer (2004, pp. 274-275)

[407] A poll conducted in 1999 by EIRIS (1999, p. 4) in the U.K. showed that 83% of pension scheme members agree that a company wishing to be seen as “ethical” should make sure its pension scheme has an ethical investment policy.

[408] See Social Investment Forum, Mercer Investment Consulting (2007, p. 2)

[409] Oesch (2000, p. 30), see also Williams (2007, p. 49)

with the organization's principles. For example church funds such as the fund of the Evangelical Lutheran Church of Finland[410], the General Board of Pension and Health Benefits of the United Methodist Church (U.S.)[411] or the pension fund for pastors and preachers of the Dutch protestant church[412] have engaged in SRI with the objective of ensuring that their investments are in line with their teachings. The Evangelical Lutheran Church writes "Ethics is not merely a supplementary aspect of discretion; the ethical viewpoint predominates throughout the investment process. The overall guideline is that only ethically well-justified solutions are rightful and acceptable. Church investments are based on the criteria of profitability, a controlled risk level and sufficient liquidity, but the ethical criterion is always emphasized alongside these. [...] The goal in responsible investment is not maximum profit but sufficient returns on ethically acceptable investments. Sufficient returns here mean adequate from the standpoint of the activity of the Church. Profit seeking is restricted in such a way that also the selection of the means forms an ethical issue as well. If the achievement of the goal calls for ethically questionable means, the end itself does not justify the use of such means". […] Accordingly, a conventional shareholder-based approach to investment would lead the fund to act in contradiction to the Church's own ethical principles, which in practice means separating the operation of the Church, on one hand, and the management of its finances, on the other".[413]

A similar line of argument holds for union funds, where due to close links beween many social issues and traditional union concerns, the trustees of a union pension fund may have an interest in investing in companies that oppose established labor practices, such as collective-bargaining rights or child labor etc.[414] As an example, UNISON,[415] Britain's biggest public sector union with more than 1.3 million members, considers investments of its pension fund in arms manufacturing to be incompatible with the union's aims and objectives.[416] As in the case of church funds, union funds promote their values not just for purely ethical reasons but also with a focus on the long-term health of corporations. For example, the American Federation of Labor Congress of Industrial Organizations[417] engages with companies on pro-worker and corporate governance issues[418] on the assumption that this fosters the overall sustainabil-

[410] See evl.fi/EVLen.nsf

[411] See www.gbophb.org/sri_funds

[412] The fund has engaged in SRI by investing in an equity fund that aims to achieve returns in line with the market, while at the same time avoids businesses that produce land mines, cluster munitions, or atomic, biological or chemical weapons. Additional categories that are excluded by the fund are businesses found to be involved in gross violations of human rights such as the use of child and forced labor, corruption and major environmental pollution (see Bandel (2008b)).

[413] See Takala, Kaariainen (2003)

[414] In the U.S. union pension funds have become one the most active of all institutional shareholders, also on corporate governance issues – see Schwab, Thomas (1998).

[415] See www.unison.org.uk

[416] See UNISON (2007)

[417]See www.aflcio.org.This is the largest federation of trade unions in the U.S. combining pension funds assets of around USD 400 billion (in 2003).

[418] See Wheelan (2008e).

ity of the firm and increases its shareholder value, thereby helping the fund to meet its fiduciary duties.[419]

Based on the above lines of argument, one can conclude that employers that are exposed to social and environmental concerns or interest group pressure (e.g. organizations from the education or health sector; social services or cultural institutions) are more inclined to consider SRI issues within the investment decisions of their pension fund.[420] To the extent that employees in these sectors share a common system of beliefs and values this may influence employers to also promote these values in the investment strategies of their pension fund. Hence, it is not surprising that the most active SRI investors include funds from the educational sector such as CalSTRS, TIAA-CREF[421] or U.K. based USS to name just a few. From this we hypothesize that:

H4.1 SRI is more likely among pension funds where the employer has a religious, union, educational, health, social or cultural background.

The mission hypothesis can be expanded to explicitly include those corporate pension funds where the employers have an established CR agenda in place that addresses environmental, social or ethical stakeholder concerns. In this context the mission hypothesis suggests that companies that are committed to such CR principles are also more likely to invest in SRI through their pension arm than those institutions that are neither aware nor responsive to such issues. This hypothesis finds some empirical support in a report by UKSIF, which examined the SRI practices of pension funds of U.K. companies that can be considered as leaders with regard to CR issues. In this study, out of 34 funds participating in the survey, nearly 75% indicate that they have some sort of SRI policy in place for their pension fund.[422] Among them 21% attribute “great significance” to the alignment of their SRI behavior with the plan sponsor’s CR or sustainability policy, while 42% give “some significance”, meaning that together nearly two thirds attribute at least “some significance”. These figures show that for some corporate pension funds the employer’s CR commitment is an important driver for their SRI behavior. From this we hypothesize that:

H4.2 Among private pension funds SRI is more likely when the sponsoring employer has established a CR agenda.

H4.3 SRI is less likely among private pension funds whose employer is active in a sector which is targeted by SRI investors, such as arms, alcohol, gambling, genetically modi-

[419] See Baue, Thomsen (2003)
[420] See Oesch (2000, p. 32)
[421] TIAA-CREF (2008, p. 2) is a fund in the academic, medical, cultural and research fields, which founds its commitment for SRI on its nonprofit heritage and mission to serve those who serve the greater good.
[422] See UKSIF (2007b).

fied organisms (GMO) and nuclear energy or involved in controversies around environmental (e.g. asbestos) or social issues (e.g. human rights violations).

In many countries, public pension funds have traditionally been among the most active SRI investors.[423] On one hand, this could be because trustees of public funds feel more exposed to serve the greater good than trustees of private funds and therefore feel a need to also align their investments with the public view. There are several public funds that follow this line of argument. For example, in 2008, the New Zealand Superannuation Fund (NZSF) announced to divest from companies associated with the manufacturing of cluster munitions. The ban came after New Zealand together with other countries ratified the international agreement banning the production of cluster bombs. According to the fund's chief executive officer such divestments have been necessary in order to "avoid prejudice to New Zealand's reputation as a responsible member of the world community".[424] Other public funds that have divested from companies on this basis include the NGPF, the Irish National Pension Reserve Fund (NPRF), the British Environment Agency[425] or AP1-4[426]. Rosén from AP2 explained that the job of AP's ethical council is to "make the interpretation of the conventions that the Swedish state have signed and make a judgment on how the companies can be associated with any violations of the conventions that Sweden has signed."[427] In addition the chief executive of AP2 further added that in order to keep track of the ethical viewpoint in its around 2'000 investment holdings, the conventions and treaties signed by the Swedish state have become their guidelines. On the other hand it has also been argued that public funds are more active in SRI as they are less exposed to conflicts of interest than private funds, meaning that they are not restricted by commercial relationships when they engage with the management of a company on an issue of concern.[428] From this we generally hypothesize that:

H4.4 Public pension funds are more likely to engage in SRI than private pension funds.

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423 In contrast, in Japan private pension funds are far more active in SRI than their public counterparts.

424 See Wheelan (2008f)

425 Howard Pearce, from the pension fund for the British Environment Agency, said, "Quite simply, we decided that we should do this because our investment strategy was not linked to our mission" (see Rosenthal (2008)).

426 The ethical and environmental policies of the four buffer funds in the Swedish pension system AP1–4 are based on the core values of the Swedish State as they are expressed in international conventions signed by Sweden and decisions on foreign policy (see Ethical Council (2008, p. 2)).

427 Rosén added: "We have the same ethical guidelines as the Swedish state has. [...] The Swedish state has signed the non-proliferation treaty on nuclear arms, meaning that according to this treaty it is allowed to have nuclear weapons only within a couple of countries. And the companies that we are talking about here are selling products and services to maintain the nuclear arms within the limits of the treaty" (see Bandel, Stewart (2008)).

428 See Prevost, Rao (2000, p. 179), Monks, Minow (2001, p. 125), Wong et al. (2008, p. 42). Black (1990, p. 599)adds that ‘‘public fund managers don't solicit business from corporate managers, so they aren't directly concerned with whether corporate managers like how they vote". Similarly Ryan and Schneider (1990, p. 599) classify public pension funds as pressure resistant institutions to the extent that they are not involved with the firms they hold in their portfolio.

4.1.3. Role of Beneficiaries

Beneficiaries of a pension fund include those individuals that are entitled to receive a payment of retirement benefits from the pension fund. They are usually not the legal owner of the assets of their pension fund, but have legal or beneficial rights or some other contractual claims against the assets of the pension fund.[429] In Switzerland where pension funds are mostly established as foundations, the legal ownership is vested in the trustee or the board of the foundation. Beneficiaries therefore have only a contractual claim to retirement payments rather than alienable claims to the equity or debt instrument itself. Contrary to other countries such as the U.K. or the U.S., in Switzerland beneficiaries have neither a choice within the system nor a direct say in where their assets are invested, although parity management theoretically allows the employee representatives put forward their position. As outlined in section 2.4, in cases where the ultimate responsibility for investing the assets is with the pension fund trustees, trustees are obliged by their fiduciary duties to invest the retirement assets prudently in the best interests of their beneficiaries (duty of loyalty). In this situation the traditional view among trustees is that the best interest of the beneficiaries is the best interest financially, which is defined as maximizing returns for a specified level of risk.[430] Sethi affirms in this context that "conventional wisdom argues that the fiduciary responsibility of the pension funds' trustees must be solely focused on their beneficiaries and therefore, their investment criteria must be based strictly on narrowly defined financial measures."[431]

Critics add here that beneficiaries are usually neither surveyed on their best interests, nor on what should be done in their view with their retirement capital.[432] In the light of the evidence that other investment drivers exist for individuals rather than purely risk and return considerations (see section 2.4.2), one could expect that in cases where beneficiaries would have a say in how their retirement assets are invested, individual differences and preferences would lead some of them to define their best interest other than with regard to pure wealth maximization considerations. This has been shown by the results of a number of surveys that indicate that investing retirement assets in line with ethical, environmental or social criteria is a real concern for many beneficiaries. From this it can be assumed that the typology of SRI investors developed in section 2.4.3 also applies to the beneficiaries of a pension fund.

- A British opinion poll conducted for the Ethical Investment Research Service (EIRIS) in 1997 found that 73% of the 700 adults surveyed wanted ethical pensions. 44% stated that their pension plan should include a SRI policy if that could be done without any reduction

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[429] See OECD (2005, p. 16), Hawley (2000)

[430] For example, regarding the famous U.K. court case Cowan v. Scargill, Langbein and Posner (1980, p. 97) write that it was established that the best interest of the beneficiaries generally means their best financial interests. Similarly, in section 404 (a) of ERISA the U.S. pension law it is established that fiduciaries shall discharge their duties with respect to a plan solely in the interest of the participants and beneficiaries and for the exclusive purpose of providing benefits to participants and their beneficiaries, defraying reasonable expenses of administering the plan (see Lanoff (1980, p. 389)).

[431] Sethi (2005, p. 99)

[432] See Barber (2006, p. 20), Caerlewy-Smith et al. (2006, p. 1586)

in financial return and a further 29% felt that their pension plan should adopt ethical policies even if this would lead to reduced returns. In contrast, only 19% of those surveyed thought that pension funds should ignore ethics and concentrate exclusively on financial returns.[433]

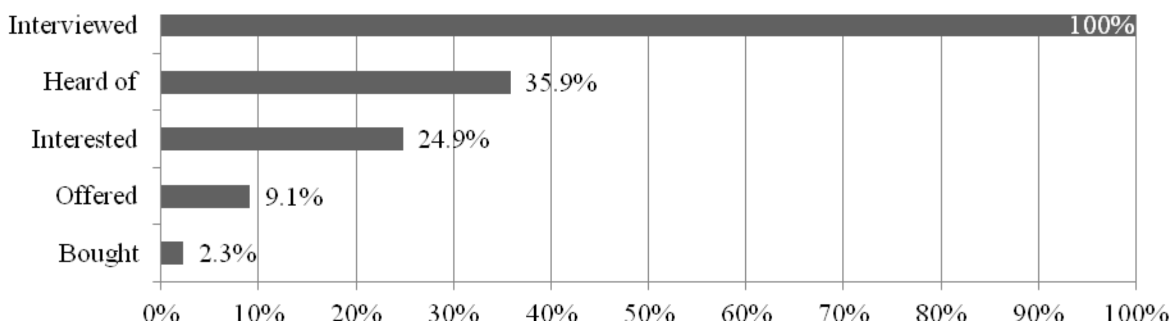
- A survey conducted in June 2000 showed that nearly 66% of beneficiaries wanted their trustees to actively apply SRI criteria to their pension assets.[434]
- A national survey conducted between 2001 and 2002 by the Canadian Democracy and Corporate Accountability Commission showed that 51% of the surveyed individuals (including retirees and people approaching retirement age) want their pension plans to invest in companies with a good CR record.[435] Contrary to the survey conducted by EIRIS, the individuals further stated that their pension funds should not only invest in companies that make the highest profits and generate the highest return, but also apply such criteria even if it means somewhat lower benefits for themselves.
- In Switzerland a survey conducted in 2005 among 800 individuals regarding their expectations of the societal responsibility of companies and pension funds showed that 56% of interviewees want their pension fund assets to be invested in SRI as long as these products achieve comparable market returns. 22% of interviewees would even accept their pension fund engaging in SRI in cases where this leads to somewhat lower returns.[436]
- In the U.K. a survey by the Department for Work and Pensions showed a particular interest in SRI among younger respondents (aged 20-34) who wished to have the choice to invest in SRI. In cases where they would not have a choice, they would like to see some reassurances that the fund itself would be ethical and compliant with certain standards.[437]

Some pension funds have indeed surveyed their beneficiaries on their preferences with regard to SRI. TIAA-CREF[438], which interviewed its beneficiaries in 2006, found that while financial return is a strong priority for their participants they also want social values to be reflected in their investments and that there is a need for more information about SRI strategies and accounts.[439] Some of the funds that have surveyed their beneficiaries have done so only after being targeted by external pressure. For example, in 2007, the Liverpool City Council voted unanimously that as a democratic organization a pension fund should reflect the ethos of its members and as such it requested the Merseyside pension fund to ballot its beneficiaries in order to determine whether they wish to see the fund's SIP amended to include SRI.[440] In

[433] See Sparkes (2000, p. 2), Yaron (2001, p. 1)
[434] See Brown J. (2007, p. 13)
[435] See the Canadian Democracy and Corporate Accountability Commission (2002, p. 41)
[436] See Furrer, Seidler (2006)
[437] See Department for Work and Pensions (2006, p. 69), Hall et al. (2006, p. 46)
[438] TIAA-CREF is provider of retirement services in the academic, medical and cultural area, and one of the largest private pension plans in the world.
[439] See Greenberg Quinlan Rosner Research (2006)
[440] See Henderson (2007)

other cases pension funds have been targeted directly by their beneficiaries.[441] For example, before becoming a promoter of SRI TIAA-CREF faced ongoing actions from the "Make TIAA-CREF Ethical" coalition.[442] Similarly, in the U.K., university teachers launched the "Ethics4USS Campaign" to promote SRI within USS.[443] Both campaigns show that when consulted, beneficiaries do not just care about maximum returns but also about where their funds are invested. However, although such surveys indicate a considerable interest in SRI among pension fund beneficiaries, this must be interpreted carefully as a social desirability bias may lead to a gap between the attitudes and the actual behavior of investors, meaning that investors included in a focus group do not want to admit that they do not care about the ethics of the companies with regard to investment decisions.[444] This gap between initial interest and a final investment decision is reflected in a survey conducted by UBS in 2005 (see Figure 34), which shows that among the individuals that have heard of SRI and that show a certain interest, only a small fraction finally invested in SRI.

FIGURE 34 – CLIENT AWARENESS OF SRI, INTEREST AND SALES



Source: UBS (2005), n = 1'704

Although the fraction of investors that ultimately engage in SRI seems rather small in the above example, other examples show that there is a real demand by beneficiaries in cases where they are offered SRI options. For example, in the U.S. a report commissioned by the SIF showed a strong increase of SRI options among DC plans in the U.S. According to the report, 19% of respondents to the survey offered one or more SRI options in 2007, while an additional 41% planned to add such an option within 3 years in order to respond to the growing demand from their beneficiaries. According to the report staff recommendations and direct requests raised by beneficiaries have been an important factor determining whether SRI options are offered.[445] Similar evidence also exists in Switzerland where under the private pension pillar the current market offering includes SRI products from Sarasin, Raiffeisen and

[441] See Fuhrmann (2007, p. 164)
[442] See www.maketiaa-crefethical.org
[443] The campaign was initiated by USS members in coordination with the Association of University Teachers (see Szczesny, Wilhelm (2005, p. 16), Sparkes (2000, p. 2)).
[444] See Nilsson (2008, p. 316)
[445] See Social Investment Forum, Mercer Investment Consulting (2007, p. 2)

Swisscanto (see Table 16). These figures show that there is a real demand by individuals for SRI in a pension fund context. Although being launched only recently compared to the conventional 3a-products, these funds have managed to attract considerable asset levels in a relatively short period of time, partially even surpassing their conventional peers. This success can partly be attributed to their excellent performance compared to other products.

TABLE 16 – SRI FUNDS AVAILABLE UNDER THE PRIVATE PENSION PILLAR

Funds	Total IA in CHF m, end of Q3 2009	Year of inception
Sarasin/BVG-Wachstum	237.49	1992
Sarasin/BVG-Rendite	41.89	2000
Sarasin/BVG Nachhaltigkeit*	95.67	2001
Sarasin/BVG-Zukunft	28.77	2006
Sarasin/BVG-Nachhaltigkeit Rendite*	6.63	2007
Raiffeisen/Pension Invest 50	682.00	1998
Raiffeisen Pension Invest Futura 50*	186.00	2006
Swisscanto/BVG 3 Portfolio 45	1'670.65	1986
Swisscanto/BVG 3 Portfolio 25	637.40	1992
Swisscanto/BVG 3 Portfolio 10	556.85	1992
Swisscanto/BVG 3 Oeko 25*	677.11	2000

Source: Fund websites; (*) SRI products

Based on the variety of preferences among beneficiaries, it can be hypothesized that:

H5.1 Pension funds that have been confronted by an explicit request to engage in SRI by their beneficiaries are more likely to invest in SRI.

H5.2 Pension funds whose representatives view SRI as being in the best interest of their beneficiaries will be more likely to invest in SRI.

4.1.4. Reliance on Investment Consultants

Another stakeholder-related characteristic that may influence the propensity of pension funds to engage in SRI, relates to the role of investment consultants within a fund's investment decision-making process. According to Lydenberg, investment consultants that serve as intermediaries and gatekeepers between institutional investors and asset managers (see Figure 33) have immense influence on the institutions and their investment behavior.[446] As such Lydenberg considers their familiarity with SRI to be a crucial factor for the institutions' position towards SRI. Clark and Urwin distinguish between three main responsibilities of investment consultants[447] where the familiarity with regard to SRI can be beneficial for the SRI behavior of pension funds. First, investment consultants may assist pension funds in the formation and clarification of a fund's organizational strategy, mission statements or SIP. Second, they may play a role in asset manager selection (e.g. via a request for proposal) and act as facilitator between the pension fund and its asset managers (see section 4.3.1. for the role of external

[446] Lydenberg in Kropp (2009), see also Frauenlob (1998, p. 233)
[447] Clark, Urwin (2008), see also Juravle, Lewis (2008, pp. 291-292)

asset managers on the decision of pension funds to engage in SRI).[448] Finally, this may even go as far as their management of the relationship between the pension fund and the asset managers over the whole investment process (e.g. including investment advice, consultancy use for risk management or performance measurement). Within this framework, abundant space exists for investment consultants with sufficient SRI expertise to respond to client demand and integrate SRI within their services (e.g. integration of SRI into the fund's organizational strategy, mandate design, manager selection and identification of appropriate investment vehicles or performance evaluation, etc.).[449]

In Switzerland, there seems to be no fully developed SRI expertise across the main consulting institutions.[450] At best consultancies occasionally address SRI on an ad hoc basis in cases where there is an explicit request by a pension fund. Knight and Dixon consider as "followers" (contrary to thought-leaders), in the sense that they are reluctant to promote SRI due to their limited expertise and conceptual confusion about what this form of investing entails.[451] In fact in reality, the limited SRI capabilities of the existing investment consultants may even evolve into a severe obstacle for the application of SRI by pension funds.[452] In contrast, the investment consultants that Knight and Dixon define as thought-leaders have higher levels of expertise and knowledge, which strengthens their ability to take a leadership position in this adviser-client relationship.[453] As such, they can build more influential relationships with their clients and overcome systemic and cultural barriers that exist among trustees especially regarding new investment approaches such as SRI.[454] Thus, given the relative novelty and continuous skepticism among trustees in Switzerland with regard to SRI, the uptake of SRI by pension funds would be to some extent contingent on the willingness and ability of investment consultants to advise their clients in this field.[455] From this we hypothesize that:

H6	Pension funds that employ investment consultants and which have no established SRI capabilities are more unlikely to engage in SRI.

4.2. PORTFOLIO CHARACTERISTICS

In addition to the above characteristics that relate to the stakeholders of pension funds, the likelihood that a pension fund engages in SRI may also depend upon a number of underlying portfolio characteristics that may impact the capacity or ability of the trustees to engage in SRI. This includes characteristics such as the size of the investment portfolio of a pension

[448] See Frauenlob (1998, p. 26)
[449] See Eurosif (2009, p. 6)
[450] See Schumacher-Hummel (2004, p. 264)
[451] Knight, Dixon (2009, pp. 18-19). Although the authors focus on ESG integration, their line of thinking can also be extended to the general disposition of investment consultants towards SRI.
[452] Schumacher-Hummel (2004, pp. 264-265), Eurosif (2009, p. 6), Berezin, Wood (2009, p. 1)
[453] Knight, Dixon (2009, p. 3)
[454] Knight, Dixon (2009, p. 16)
[455] Knight, Dixon (2009, p. 9)

fund (see section 4.2.1), its risk taking capacity, which is closely related to the past performance of a pension fund (see section 4.2.2), a fund's investment horizon (see section 4.2.3), the level of portfolio diversification (see section 4.2.4) and finally the degree of portfolio concentration i.e. the size of corporate holdings of which the pension fund portfolio is composed (see section 4.2.5).

4.2.1. Portfolio Size

The first characteristic that has been repeatedly suggested to be positively related to the propensity of a fund to engage in SRI concerns the size of a pension fund portfolio. Various authors argue that larger funds are more inclined to engage in SRI than smaller ones.[456] This is consistent with earlier findings that larger funds more frequently engage in SRI[457] as well as that some of the largest funds which are signatories to the UNPRI act as SRI thought-leaders (see Table 17).

TABLE 17 – THE WORLD'S LARGEST PENSION FUNDS IN TERMS OF IA

Pension fund	Country	IA in USD bn	UNPRI signatory
Government Pension Investment	Japan	1'059	-
TIAA-CREF	USA	386	☑
ABP	Netherlands	231	☑
NGPF	Norway	207	☑
CalPERS	USA	168	☑
Local Government Officials	Japan	164	-
Federal Retirement Thrift	USA	141	-
National Pension Service	Korea	135	☑
New York State Common	USA	117	-
Pension Fund Association	Japan	117	-
CalSTRS	USA	117	☑
Postal Savings Fund	Taiwan	110	-
General Motors	USA	107	-
Florida State Board	USA	103	-

Source: Based on Watson Wyatt (2005) and the list of UNPRI signatories as of mid 2009

An explanation for the preference of larger investors for SRI is supported by the underlying assumption that compared to conventional investments SRI creates additional costs as it requires a special set of skills from investors to process often inaccessible and difficult to analyze information on a firm's CR performance. Scale effects may mean that larger pension funds have internal capabilities to address these challenges, whereas smaller funds would need to rely on external capabilities.[458] In this context Green writes: "for many institutional

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[456] See Rudd (1981), Tippet (2001), Szczesny, Wilhelm (2005), Cumming, Johan (2007),(2007), Scheibelhut (1997, p. 34), Davis, Steil (2001, p. 9), Ellis (2008)
[457] See Mathieu (2000), UKSIF (2007b, p. 5), Williams (2007, p. 46), UKSIF (2009, p. 10), Preesman (2010)
[458] See Heiner (1983), Black (1992, p. 822), Szewczyk et al. (1992), Kochhar, David (1996, p. 74), David et al. (1998, p. 201)

shareholders, the main obstacle to doing so [SRI] is not opposition to the idea, which can often make good business sense, but the apparent difficulty of putting it into practice with the limited resources available."[459] Larger investors may be in a better position to reap economies of scale in terms of acquiring and analyzing CR information or engaging with a large number of firms since they are capable of doing so at lower unit costs compared to smaller funds.[460] Thus, fund size may play a role to the extent that, according to Müller, building up respective in-house capabilities involves considerable initial investment in manpower, know-how, databases and information gathering to develop the expertise to screen and analyze companies according to a specific predefined CR framework.[461] However, once set up, economies of scale may emerge in gathering and analyzing SRI information for a large number of firms in a portfolio, thereby reducing per-company research costs.[462] Thus, once a system has been developed, volumes could be increased without a corresponding increase in costs as many process and structural issues arise in a similar form at many companies.[463] According to Black, the same holds for shareholder engagement activities, noting that a shareholder who makes the same proposal at a number of companies can reduce per-company solicitation costs, while preserving the per-company benefit from success. Similarly, voting on the same proposal many times make it worthwhile to invest time and attention in casting an informed vote.[464]

In contrast smaller pension funds, which do not have the resources to build up their own management capabilities, may need to rely on external service providers (see section 4.3.1).[465] While the increased availability of pooled products and information from specialized rating agencies has certainly enhanced their access to SRI[466], it could be argued that the great diversity of the current SRI offering, as well as the lack of transparency of SRI products still requires them to attribute considerable resources to establishing the necessary expertise in this area. This may cause them to abstain from engaging in such non-conventional products. From this we hypothesize that overall:

H7 Larger pension funds are more likely to engage in SRI than smaller funds.

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459 Green, Duncan (2001)

460 See Norges Bank (2001), Davis, Steil (2001, p. 13). Such economies of scale may arise from the ability to transact in large volumes, which typically leads to a lowering of commission charges. Investors share the costly services of expert investment managers and thereby save in advisory fees.

461 See Müller (2002, p. 21)

462 See David et al. (1998, p. 201), Black (1992, p. 822)

463 See Black (1992, p. 822). Conversely Alchian and Demsetz (1972) suggest that large investors may also turn out to be less committed to monitoring managerial behavior as their ownership becomes dispersed (e.g. as a result of an indexing strategy). In such cases the marginal costs for monitoring an individual company in the portfolio are larger than if they would hold more concentrated equity.

464 Shareholder coordination among AP1-4, the four buffer funds in the Swedish pension system, demonstrates how combining both resources and votes of companies helped reduce costs for monitoring and engaging with companies and increased company dialogue, see Ethical Council (2008, pp. 1-2).

465 See Caerlewy-Smith (2006, p. 1586)

466 See Ellis (2008)

4.2.2. Risk-Taking Capacity

As stated earlier, article 71 of the BVG requires that pension fund assets be managed prudently to ensure the security of assets, achieve a reasonable return on investments, maintain a suitable diversification of risks and allow for the liquidity requirements of the pension plan. Based on this article, we conclude that pension funds should opt for SRI, either on the basis of purely financial considerations or on the basis of ethical considerations, as long as they are balanced with reasonable returns. Evidence however suggests that some pension funds engage in SRI although they do not expect SRI to outperform in financial terms over the long run. Moreover, some funds even engage in SRI although they consider it to involve higher costs and cause higher levels of risks than their conventional benchmarks.[467] This is even more surprising as the trustees in charge of the management of the fund's assets are legally liable for any losses or damages caused willfully[468] – involving decisions that are inconsistent with the obligations imposed by the rule of prudence.

The room to maneuvre for pension fund trustees in Switzerland to engage in SRI is considerably larger as they are assumed to be basically free in their investment decisions as long as they are able to meet their financial obligations at any time.[469] In situations where funding gaps exist, trustees are obliged to undertake adequate measures to return to a situation where they are fully funded.[470] Trustees are therefore expected to have strong incentives to minimize any risks that could get them into a situation where their liquidity requirements cannot be covered anymore. In other words, differences in the funding level and therefore the risk-taking capacity of pension funds are likely to have an impact on their flexibility to take on more risk. Hence it can be assumed that underfunded pension funds will not invest as aggressively as fully funded ones and have only limited preference for higher risk strategies, both in terms of asset allocation and in demand for non-standard products.[471] Correspondingly, better performing and hence better funded pension funds are more likely to engage in non-standard products such as SRI if this form of investing is expected to incur a financial penalty (see section 4.1.1.1 for the perception of pension fund trustees regarding SRI).[472] Trustees who are skeptical of SRI, but feel being pressured to consider this as an investment option (e.g. due to the request by their beneficiaries) will only invest in SRI if they can actually afford it. In contrast, for underfunded pension funds that consider SRI on the basis of sound financial considerations (e.g. as they expect SRI to impact long-term financial value), this form of investing may serve as a prudent means to achieve increased returns and to overcome the funding gap. From this we hypothesize that:

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[467] See Lusenti (2009)

[468] See article 52, § 1, BVG. See Vetter-Scheiber (2009, p. 156)

[469] See Queisser, Vittas (2000)

[470] See Queisser, Vittas (2000), Frauenlob (1998, pp. 66, 206)

[471] According to Rauh (2007), poorly funded pension funds generally allocate a greater share of pension fund assets to safer securities such as government debt and cash, whereas well-funded pension funds invest more heavily in equity.

[472] See Schumacher-Hummel (2004, pp. 217, 269)

H8.1 Pension funds without a positive perception of SRI with regard to long-term financial performance will be more likely to invest in SRI when they are fully funded.

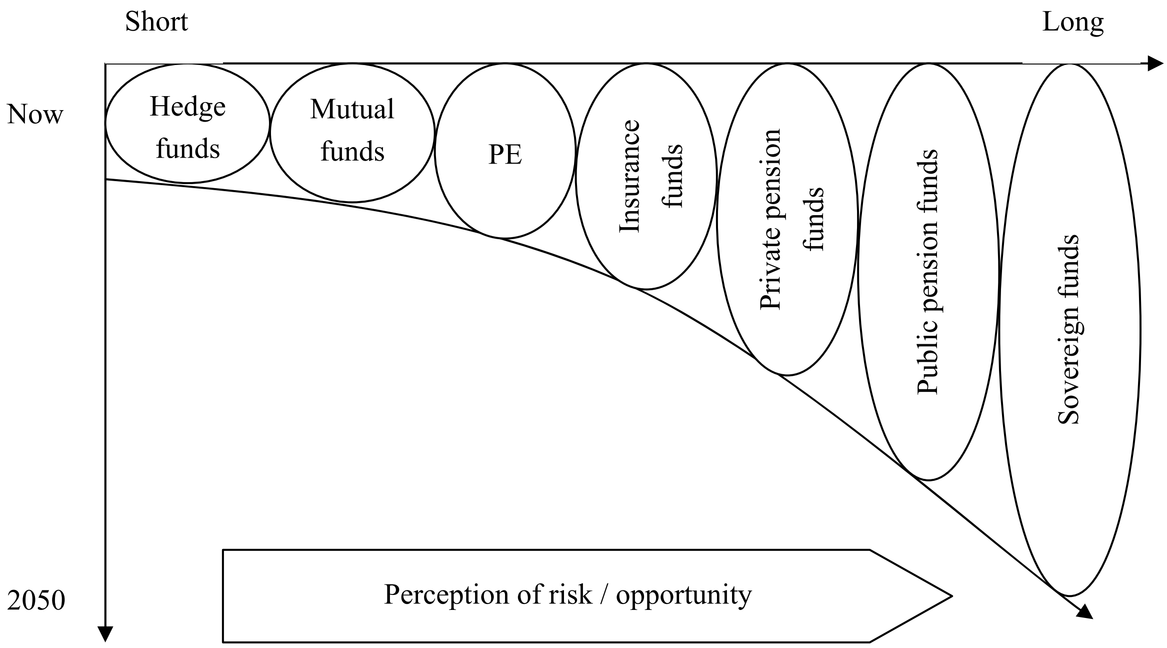
H8.2 Underfunded pension funds will be more likely to invest in SRI when they have a positive perception of SRI.

4.2.3. Investment Horizon

As outlined in section 2.5.3.2, sustainability often requires a long-term perspective.[473] Thus, a third portfolio characteristic, which is often associated with the specific role of pension funds as SRI investors, concerns their long-term investment horizon. According to Knight and Dixon, with their exposure to a wide variety of asset types and geographies over a long time horizon, pension funds may have the potential to improve their overall returns by taking SRI considerations into account in their investment and ownership choices.[474] Long-term investors are typically characterized as investors that have a long investment horizon, which according to Davis and Steil relates to the planned liquidation date of an investment[475] and which is measured by the concept of effective maturity or duration of an investment. That is the holding period of an asset. Using this definition, pension funds are considered as typical long-term investors. For example, in the 2008 CDP report sovereign and public pension funds are defined as those investors that have the longest investment horizons, while hedge funds have among the shortest (see Figure 35). As such, they are expected to have a natural interest in SRI as it has the potential to affect the performance of a portfolio of a pension fund in the long run. For example, ABP, the Dutch civil service pension fund engages in SRI on the assumption that companies with high CR performance will also deliver higher long-term financial performance.[476] Similarly, the preamble to the UNPRI states that "as institutional investors, we have a duty to act in the best long-term interests of our beneficiaries. In this fiduciary role, we believe that [ESG] issues can affect the performance of investment portfolios".[477]

[473] See section 2.5.3 for an overview of how ESG integration may help investors to reduce risks and seize opportunities in the long run.
[474] Knight, Dixon (2009, p. 8)
[475] See Davis, Steil (2001, p. 53)
[476] See Brooksbank (2005)
[477] See UNPRI (2006)

FIGURE 35 – LENGTH OF INVESTMENT HORIZON FOR DIFFERENT TYPES OF INSTITUTIONAL INVESTORS



Source: PricewaterhouseCoopers (2008, p. 86)

The relatively long holding period of pension funds results from the simple fact that pension funds have to finance long-term liabilities of 20 years or more.[478] In the case of a defined benefit (DB) plan, these liabilities consist of a specific level of benefits at a point in time when the retirement falls due, whereas for a DC plan trustees have the duty to preserve their beneficiaries' contributions until retirement. In contrast, mutual funds' primary investment objective is to achieve a high current return, which leads mutual funds to adopt an active management style or trader strategy in order to take advantage of short-term opportunities. As a consequence, this leads to a higher trading rate and to a reduction in the average holding period of shares.[479] In addition, pension funds also benefit from the predictability of their long-term in and outflows of capital, which are similar to those of life insurance companies, some charitable funds or endowments.[480] As such they have a high level of control over what will be paid out or when a position will have to be liquidated,[481] allowing them to make precise investment decisions over a relatively long period of time. In contrast, mutual funds have an instant repurchase clause offering short-term liquidity either via direct redemption of holdings (open-end fund) or via the ability to trade shares in the funds on exchanges (closed-end fund). Since their beneficiaries may redeem shares at any time, mutual funds are confronted

[478] See Drucker (1976, p. 71), Freshfields Bruckhaus Deringer (2005, p. 7), Hesse (2008, p. 4). Hesse (2008, p. 22) examined the investment horizon of a number of pension funds concluding that on average their investment horizon is 23 years (answers varied between 10 and 30 years).

[479] See Johnson, Greening (1999, p. 566). Kempf and Osthoff (2008, p. 1279) showed that the turnover of SRI funds is lower than for conventional funds.

[480] See Frauenlob (1998, p. 67), Ryan, Schneider (2002, p. 560)

[481] Since 1995 the predictability of in- and outflows of pension assets in Switzerland has been somewhat restricted due to the full portability of assets (see Queisser, Whitehouse (2003, p. 11)).

with greater liquidity requirements and shorter time horizons.[482] The relatively long holding period of pension funds is also confirmed empirically by Gilson and Kraakman, as well as Hawley and Williams who showed that on average pension funds hold their assets for longer periods than other institutional investors.[483] According to the authors, this largely results from the fact that due to their size and the number of individual portfolio holdings, they have a strong preference for passive indexation strategies which naturally lead to a lower rate of asset turnover and hence to a longer average holding period.[484] On the basis that genuine long-term investors should be positively inclined towards addressing environmental, social and corporate governance concerns within their investment decisions and that the effective long-term orientation of pension funds differs among pension funds, we hypothesize that:

H9 Pension funds with longer investment horizons tend to engage more in SRI than those funds with shorter investment horizons.

4.2.4. Portfolio Diversification

Another fund characteristic that is increasingly linked with the SRI behavior of pension funds refers to their level of diversification and hence the number of individual holdings they have in their portfolio. The underlying argument is that an investor who owns a widely diversified portfolio with broad market exposure (so-called universally diversified investors) will maximize their overall portfolio return by minimizing negative externalities that emanate from companies in the portfolio, while at the same time promoting positive ones.[485] Whereas a normal owner of a company may benefit when a company externalizes its costs to third parties[486], a so-called universally diversified investor may end up with a reduction in overall portfolio wealth as those externalities could adversely affect other holdings in the portfolio or the economy as a whole. This means that finally a universally diversified investor adopts a perspective close to that of a public planner and is attentive to the impact of externalities on other actors and on society as a whole as these may result in outcomes that are sub-optimal from a portfolio point of view.[487] According to Hawley and Williams, investors qualify as universally diversified when they hold a large number of assets that represent a cross section of the economy. More precisely, they specify that a universally diversified investor should hold between

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[482] See Davis, Steil (2001, p. 12), Cox et al. (2004, p. 31), Ryan, Schneider (2002, p. 560)

[483] See Gilson, Kraakman (1991). Hawley and Williams (2000, p. 7) report that among U.S. institutional investors, public pension funds had the lowest turnover rate of all institutions, which suggests that they were holding assets for a longer period than other institutional investors such as banks, insurance companies, corporate pension funds, mutual funds, and money managers.

[484] See Gilson, Kraakman (1991), Johnson, Greening (1999, p. 567), Hawley, Williams (2000, p. 7)

[485] See Monks, Minow (2001), Hawley, Williams (2000), Hawley, Williams (2002), Amalric (2004a), Thamotheram, Wildsmith (2006), Department of the Environment and Heritage (2003)

[486] See Monks, Minow (1996, p. 121). For example, for a conventional investor holding only a single company in its portfolio, externalizing costs to other stakeholders may be consistent with wealth maximization considerations. In contrast, issues such as pollution control may be considered as causing unacceptable expenses.

[487] According to Cullis and Lewis (1992, p. 7) the existence of SRI investors factoring negative externalities suggests (partial) private willingness to provide a public good.

1'500 and 4'500 different stocks to make them own a representative fraction of the economy.[488] Based on this somewhat vague definition, pension funds such as the NZSF with total assets of € 13.5 billion and 3'000 portfolio holdings (as of mid 2008)[489] or the NGPF, with € 252.7 billion of IA and over 7'000 individual holdings (as of end 2007) would both qualify as universally diversified investors.[490] Although pension funds vary substantially with regard to their level of diversification, we expect that larger pension funds that apply passive indexing strategies can be considered as universally diversified according to the definition by Hawley and Williams. This is because through passive indexing strategies they end up being diversified across a wide range of companies and eventually owning a representative sample of the economy.

SRI proponents propose that universally diversified investors should have a natural interest in SRI. For example Hawley and Williams see convergence between many of the aims of the SRI community and portfolio wide issues that should be of interest for universally diversified investors.[491] In fact, assuming that financial markets may not always ensure that environmental, social or corporate governance issues are adequately factored in company valuations, the integration of such aspects through SRI may be an effective means to address such shortcomings. An issue which has gained considerable attention in this context is climate change, which for some can be considered as the greatest market failure and the single most important issue facing humanity.[492] It can be argued that companies that contribute to climate change through their CO_2 emissions are not regulated in a way such that the prices of their products or services fully reflect the costs they impose on society in the long run through their CO_2 emissions. Authors such as Wong et al. write that it should be in the direct interest of universally diversified investors to address climate change related externalities that arise from the activities of companies included in their portfolios.[493] Similarly, the authors of the 2008 CDP report write that it would make sense for such investors to identify 'carbon laggards' and to engage with them with the objective of reducing carbon-related risks and thereby minimizing the negative impact of subprime carbon investments on their portfolio[494] The same rationale may also apply for other SRI themes such as good corporate governance, executive pay, corruption, education, environment, water use, biodiversity or health issues such as obesity or tobacco consumption.[495]

Public policy makers may use taxes, levies and tradable permits to hold companies accountable for negative externalities and force them to internalize costs. Instead, universally diversi-

[488] Hawley, Williams (2002, p. 152)
[489] See O'Connor (2008)
[490] See Norwegian Government Pension Fund (2007)
[491] Hawley, Williams (2002, p. 152)
[492] See Stern (2007a), Schöchli (2008), UNEP FI (2009, p. 5)
[493] Wong et al. (2008, p. 8)
[494] PricewaterhouseCoopers (2008, p. 87)
[495] For the identification of issues see Hawley (2000), Amalric (2004a), Syse (2008), Hebb (2006)

fied investors theoretically also have different channels to factor such externalities and influence the management of a firm. For example, they can put pressure on companies that externalize their costs by threatening to exclude them from the portfolio or by directly interacting with the management in the form of shareholder activism.[496] Alternatively, they can actively promote companies that act in a socially responsible manner, either by directing capital towards new technologies or factoring such costs into the valuation process of the company.[497] However, there are also obstacles for such investors in applying strategies that may result from the fact that they are indexed and therefore own only a small fraction of any target company. For example, with regard to shareholder engagement the level of diversification of the investments of such an investor and hence the limited percentage of voting rights resulting from indexing would prohibit a universally diversified investor from exerting a significant influence on the management of a target company. Furthermore, due to their size it could be argued that they can neither select only the best in class companies to promote positive externalities nor disinvest from large portions of the market to punish for negative ones.[498] Thus at the end of the day, shareholder engagement may still be the most effective strategy in situations where universally diversified investors collaborate among each other and end up with what Monks and Minow call the paradoxical result of passive investing, which is active ownership.[499]

H10 The more a pension fund portfolio is diversified, the higher the interest of the fund in factoring in externalities that impact the value of the other assets in the portfolio by engaging in SRI.

4.2.5. Size of Corporate Holdings

Contrary to the previous section, another portfolio characteristic that is often considered as a precondition for investors to invest in SRI builds on the assumption widely discussed in corporate governance literature that shareholders owning a large block of a company have a larger say and therefore are better positioned to exercise pressure on management to promote good corporate governance practices.[500] Based on this line of argument, proponents of SRI argue that pension funds, by virtue of the scale of their corporate ownership, have the neces-

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[496] Straightforward exclusion would be ineffective to the extent that as soon as the assets are sold investors can no longer interact as shareholders with the management of the firm while the portfolio wide impact persists.

[497] See section 2.5.2 for the effectiveness of these strategies to impact the management of a firm.

[498] In this regard, John Oliphant, actuarial and investments head of the South Africa's R 711 billion (USD 69 bn) Government Employees Pension Fund states that "unlike smaller funds, we cannot simply buy and sell specific shares to avoid systematic social, environmental and governance issues that affect share prices across the board. The only option available to us is to influence corporate behavior" (Wheelan, 2008h). Similarly Hawley and Williams (2000, p. xiv) argue that widely diversified investors making use of indexing strategies are not in a position to pick individual stocks as they are too large to selectively purchase only the best performing stocks. Their size ultimately demands that they buy what is essentially a cross section of the whole market.

[499] Monks, Minow (2001, p. 121)

[500] See Pound (1992, p. 67), Ryan, Schneider (2002), Bainbridge (2005)

sary investment power to promote CR issues, either through screening or by directly engaging with the management of a target firm (see section 2.5.2).[501] In fact, pension funds have emerged in the past decades as one of the greatest sources of institutional equity ownership.[502] Boerner writes that in the U.S. "pension fund trustees and managers, along with their outside advisors and money managers, have arguably become the most powerful investment force. Their combined influence on individual companies and in the capital markets is considerable, as corporate finance executives well know."[503]

As shown in section 2.5.2.1, investors have basically two ways to act on the management of a firm: either by threatening or actually divesting themselves of their shares or by exercising their shareholder rights and directly engaging with management. In both cases they are assumed to be more effective the larger the corporate holdings are. From a financial perspective however, shareholders with majority stakes in a company should have a clear preference for shareholder engagement rather than for excluding companies from their portfolio.[504] With regard to shareholder engagement this is because shareholders with large concentrated ownership have a greater incentive to monitor the activities of the firm than shareholders who own only a minority stake.[505] The latter tend to be passive, as the costs for monitoring or engaging exceed the benefits. Thus they end up free riding on the efforts of the larger shareholder because costs for monitoring and engaging with the company are fully borne by larger activist shareholders, whereas the benefits are shared among all.[506] In contrast, majority shareholders can overcome such collective action problems as the relative benefits of monitoring or engaging increase, thereby reversing the cost benefit ratio and making monitoring or engagement

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[501] See Monks (2001, p. 9), EIRIS (2003, p. 3). In a survey among 456 of the Fortune 500 firms, Shleifer and Vishny (1986, p. 462) found that large shareholders of these companies include families (149 cases), financial firms such as banks, insurance companies, or investment funds (117 cases), firms and family holding companies with large stakes who do not have board seats (100 cases) but also pension and profit-sharing plans (90 cases).

[502] See Drucker (1976), Graves, Waddock (1994, p. 1034), Brown (1998, p. 804), Monks (2001, p. 9), Sethi (2005, p. 100)

[503] Boerner (2005, p. 39). Brown reports that in the U.S. in 1996 pension funds accounted for 25% of total assets held by institutions (in 1946 the figure was only 3%). Pension and mutual funds together controlled 37% of corporate equity in 1996.

[504] At a first glance the proposed relationship between shareholder engagement and the concentration of ownership runs against what we have proposed in section 4.2.4 with regard to the relationship between shareholder engagement and dispersed ownership – where we have argued that shareholder engagement is a reasonable strategy for universally diversified investors who, due to passive indexing strategies, own small holdings in a large number of companies. The difference between the two views is that while in the former the investor has a perspective limited to a particular company or industry, a universally diversified investor has a portfolio perspective taking account of the impact a company has on society, because this impact may bear on the value on their portfolio in the middle to long term. Hence for a universally diversified investor the value added from engagement is not measured by the impact on the shareholder value of the target company (which in this case would be negative) but by the minimization of negative spillover effects across the portfolio.

[505] See Shleifer, Vishny (1986, p. 462), Black (1992, p. 821), Pound (1992, p. 67)

[506] See Shleifer, Vishny (1986, p. 462), Froot, Perold, Stein (1991), Pound (1992, p. 67), Monks (1995, p. 2), Barber (2006, p. 5)

cost effective.[507] From this, one can hypothesize that a pension fund that owns a larger percentage stake in a company is more likely to engage in monitoring and shareholder activism engagement than a fund that owns only a minor position. In section 2.5.2.1.1 we showed that a larger holding in a company may increase the effectiveness of negative screening on the share price of a company and thereby increase leverage. However, pension funds that own large positions have only limited flexibility to exit their investments as selling could create substantial transaction costs (e.g. depress the company's share price)[508] and thereby ultimately affect returns to their beneficiaries. This effect may further be amplified as market participants assume large block holders to have close relationships with the firm. As such, they are assumed to have access to information or insights that are not available to other shareholders. In such a situation, a fund's decision to divest itself of shares may attract significant market attention.[509] Accordingly, large shareholders could act as price makers, signaling to other market participants that a firm is unwilling to negotiate with its shareholders.[510] Ultimately it may turn out to be cheaper for a large and concentrated owner to become proactive in an attempt to change corporate practices rather than by selling the firm's assets or remaining passive.[511] From this we hypothesize contrary to hypothesis H10 that:

H11	Pension funds with large and concentrated holdings in a single company are more likely to engage in SRI than dispersed shareholders.

4.3. Institutional Characteristics

In addition to the previous fund characteristics, pension funds can be further classified by several institutional characteristics, some of which can be argued to have an impact on the fund's propensity to engage in SRI. In the following sub-chapter the key institutional variables collected are the degree of external asset managers used (see section 4.3.1), the level of communication on investment decisions between the pension fund and its beneficiaries (see section 4.3.2), whether the funds are closed or open to external membership (see section 4.3.3) or the type of the pension plan, (DC or DB plan) (see section 4.3.4).[512]

[507] See Smith (1996), Prevost, Rao (2000, pp. 178-179), Romano (1993). As a response to the inefficiencies caused by free riding a levy among investors has been suggested to support effective shareholder engagement and tackle the problem of 'free riders' which also discourages more widespread engagement among investors (see Steward (2009)).
[508] See Shleifer (1986, p. 579), Pound (1992, p. 87), Brown (1998, p. 806), Johnson, Greening (1999, p. 566), Cox et al. (2004, p. 27)
[509] See Honghui (2003, p. 4)
[510] See Gillan, Starks (2000, p. 301), Hesse (2008, p. 29)
[511] See Forstmoser (2005, p. 805), Graves, Waddock (1994, p. 1036)
[512] The role of the legal form of pension funds (private and public sector funds) has been examined under stakeholder characteristics in section 4.1.2.

4.3.1. Reliance on External Asset Managers

A first institutional characteristic of pension funds relates to the question of whether fund assets are managed 'in-house' or by an external asset manager. As for conventional pension fund assets, SRI IA can be either managed by the pension fund itself or outsourced to an external asset manager providing specialist SRI services (e.g. by the employer or an external asset manager).[513] Contradictory views exist of the role of external asset managers with regard to a fund's propensity to engage in SRI. Del Guercio and Hawkins argue that "funds that delegate investment functions to external managers effectively disconnect their activism efforts from their investment actions, thus preventing them from profitably trading on any private information that results from their activism"[514]. Similarly, Knoepfel supports the view that investors that have outsourced their investment management face restrictions in directly influencing decisions, as the ultimate investment decision is made by the portfolio manager and not by the investor. They are less likely to take into account ESG issues in both active ownership activities and portfolio management.[515] In contrast, it could also be argued that those funds that outsource their asset management may benefit from the growing SRI offering that is available from either specialist SRI asset managers or conventional asset managers with separate SRI capabilities.[516] Pension funds rarely have their own internal SRI capabilities in place to manage SRI themselves. To the extent that this holds also for Swiss pension funds which rarely have their own in-house SRI capabilities we hypothesize that:

H12	Pension funds in which investment decisions are delegated to outside professionals will be more likely to invest in SRI.

4.3.2. Level of Disclosure

Another institutional characteristic that may relate to the SRI behavior of a pension fund refers to the level of disclosure of a fund with regard to its investment decisions. For example, in the U.K. in 2000, an amendment to the 1995 Pensions Act required occupational pension funds to disclose how they take account of SRI in their SIP, if at all.[517] It is important to note that under this legal requirement, trustees still have the option to state that they do not take SRI into account. However, it is argued that the sole fact that they are required to disclose information on their SRI behavior puts a certain pressure on them to justify their position and to look into this topic. In Switzerland, no such regulation exists for pension funds – although they are required to disclose whether they take account of their shareholders' rights or not. Assuming that pension funds with higher levels of disclosure regarding their investment practices and policies are more accountable to their beneficiaries, we hypothesize that pension

[513] Due to economies of scale it is mainly larger pension funds that have their assets managed internally, see Knight, Dixon (2009, p. 9), Investment & Pensions Europe Magazine (2009, p. 26). According to Weber et al. (2009, p. 59) In Switzerland most pension funds do not have internal asset management capabilities.
[514] Del Guercio, Hawkins (1999, p. 301)
[515] Knoepfel (2009, p. 11). See also Cumming, Johan (2007, p. 412), Stapledon (1996, p. 34)
[516] See Juravle, Lewis (2008, pp. 290-291), Schumacher-Hummel (2004, p. 245)
[517] See Mathieu (2000). Similar legislation exists in France, Belgium, Germany, Italy and Sweden.

funds which inform their beneficiaries of their general investment practices are more exposed to potential requests by their beneficiaries. This also takes account of the evidence outlined in section 4.1.3 that there is a growing interest among beneficiaries to invest their pension money in line with certain SRI criteria.

H13 Pension funds that inform their beneficiaries of their investment strategy and decisions are more likely to engage in SRI.

4.3.3. Administrative Form

Another institutional characteristic of pension funds that we want to explore relates to whether a pension fund is closed or open to external membership. In Switzerland, larger companies usually establish their own single employer pension fund, while smaller employers tend to join a collective or group pension fund in order to avoid the administrative burden of establishing and running their own fund or simply because they do not have the financial expertise to profitably invest their pension assets.[518] With regard to such collective or group pension funds, one can distinguish between pooled foundations where the pension funds of the affiliated companies keep their own contribution and benefit rules and investment committee, and joint foundations where a joint board, composed of representatives of the pension funds of the affiliated companies and the managing firm, is in charge of the management of the fund (including investment decisions).[519] In principle, collective foundations are open funds with no restriction on membership. However, in certain closed cases collective funds support only pension funds of related employers (e.g. companies that are members of a specific industry or community).[520] To the extent that the open funds have to compete for clients / members and that there is greater attention among companies regarding CR issues, one could suggest that the existence of a SRI strategy may be a positive differentiating factor to attract companies that want to invest their pension money according to environmental, social or ethical principles.[521] From this we hypothesize that:

H14 Open funds (pooled or open joint foundations) are more likely to invest in SRI than pension funds with only restricted membership (closed joint foundations or single employer funds).

4.3.4. Plan Type

In this section we will explore the relationship between the funding obligation of a pension fund and its propensity to engage in SRI. Generally, one can distinguish between two categories of pension funds with regard to benefits: DB and DC plans. In the former case, the sponsoring employer is committed to a specific payout, independent from the contribution made by the employee and from the performance of the investments over time. To the extent that

[518] See Queisser, Whitehouse (2003, p. 8)
[519] See Queisser, Whitehouse (2003, p. 9)
[520] See OECD (2002b, p. 7)
[521] See Szczesny, Wilhelm (2005, p. 16)

the primary investment objective of the employer is to meet a specific level of retirement benefits at a point in time when the retirement falls due, the financial risk is borne by the employer. In contrast, in the case of a DC plan the benefits to members are based "solely on the amount contributed to the plan by the sponsor or member plus the investment return thereon".[522] To the extent that returns to members depend on market developments, beneficiaries end up bearing the investment risks.[523] In recent years, the Swiss pension landscape has experienced a continuous shift from DB to DC plans as employers have sought to minimize the risks of their obligations. As a result, by the end of 2007 the large majority of funds are DC plans, accounting for 2'265 pension funds as compared to 278 funds that pursue a DB plan. This holds especially for the corporate sector, where around 90.7% of the funds run a DC plan (2'218 / 227). In contrast public funds are more balanced to the extent that 48% have a DC plan and 52% a DB plan (47 / 51).[524]

In section 4.2.2, we explored the role of a fund's risk taking capacity on its propensity to engage in SRI, contingent on the fund's underlying perception of SRI. The distinction between the types of plans has similar implications on the propensity of pension funds to engage in SRI. This is mainly because in the case of a DB plan, most of the financial risk involved with investing falls back on the employer whereas under a DC plan it has to be borne by the beneficiaries.[525] Davis and Steil write that DB funds generally need to hedge or hold more cautious portfolios than DC funds in order to allow for the risk of going below minimum solvency levels.[526] Hence, in this setting, the propensity of a DB plan to engage in SRI is largely a function of the fund's perception with regard to the financial viability of SRI. That is, a DB plan is more likely to engage in SRI on the basis of sound financial considerations where larger expected long-term returns would reduce the risk of additional contributions from the sponsoring company.[527] Thus a DB plan that believes in the financial value added by SRI should have an interest to factor material ESG issues either through its investment decisions or by engaging with companies. In contrast, in cases where SRI is considered without regard to the prudence of the investment, DC plans are more likely to engage in SRI than DB plans as for a DB plan such an investment would be at the cost of the sponsoring company, while under a

[522] See OECD (2002b, p. 4)
[523] See Weber et al. (2009, p. 57), Ryan, Schneider (2002, p. 562), OECD (2002b, p. 4)
[524] See Federal Statistical Office (2009, p. 13)
[525] See Bank for International Settlements (2007, p. 4). It is important to note that in Switzerland DC plans have also a DB component as the Swiss pension law requires pension funds to provide minimum contributions, a minimum rate of return and a factor for converting accumulated capital into an annuity (see Queisser, Whitehouse (2003, p. 8), Ammann, Zingg (2008b, p. 5)). In some countries (e.g. the U.K. and the U.S.), DC plans offer their beneficiaries a short list of funds from which they can select the investments and allocations for their contribution. In such cases it is up to the beneficiaries to define their preferences with respect to risk and return and the composition of assets held in other accounts (see Queisser, Whitehouse (2003)
[526] Davis, Steil (2001, p. 11), see also Rauh (2007)
[527] See Ryan, Schneider (2002, p. 562)

DC plan the risk involved with this form of investing would finally be borne by the beneficiaries.[528] From this we conclude that:

H15.1 Pension funds with a DB plan are more likely to engage in SRI when they have a positive perception of SRI.

H15.2 Among the funds without a positive financial perception of SRI, DC plans are more likely to invest in SRI than DB plans.

[528] See Langbein, Posner (1980, p. 91), Knight, Dixon (2009, p. 26)

5. METHODOLOGY AND SURVEY RESULTS

In this chapter we first address the sources of the data used in the empirical analysis (see section 5.1) followed by a discussion on the representativeness of the sample (see section 5.2). Section 5.3 provides detailed background on the variable descriptions for both the dependent variable and the independent variables. Finally, section 5.4 introduces the methodology used to examine the determinants of the SRI behavior of Swiss pension funds and provides summary statistics.

5.1. DATABASE

To analyze the determinants of the SRI behavior of Swiss pension funds, primary data used in was obtained from SPFS 2008, (see chapter 3 where we first used the data to describe the general SRI behavior of Swiss pension funds). Where gaps exist, we complemented the SPFS 2008 data with data from SPFS 2007 and from 2007 annual reports (where available).[529]

5.2. SAMPLE CHARACTERISTICS

Except for data obtained through SPFS 2007, all variables are measured at the end of December 2007. To obtain data Swisscanto contacted about 2’000 representatives of autonomous or semi-autonomous pension funds by mail. Participants were asked to respond to an online questionnaire available at www.swisscanto-pk-studie.ch. 265 pension funds provided valid responses that were used for the analysis in the official Swisscanto report.[530] For our analysis, after removing invalid data we obtained a sample of 249 pension funds, of which 81 funds indicate some sort of SRI behavior. As shown in Table 18, compared to the overall pension fund universe determined by the FSO, the selected sample cannot be considered a close approximation to a random sample as it is biased towards fund size, legal form and plan type.

TABLE 18 – SAMPLE CHARACTERISTICS[531]

Parameters	Federal Office of Statistics (end 2007)	SPFS 2008 sample
Number of funds	2’543	249
Total IA (CHF bn)	605.5	385.9
Average pension fund size (CHF bn)	0.24	1.57
Legal form: private / public	2’445 / 98	203 / 46
Plan type: DC / DB	2’265 / 278	186 / 58

Source: Federal Statistical Office (2009, pp. 13,15), Swisscanto 2008

By the end of 2007, the overall Swiss pension fund population consisted of 2’543 funds with a combined value of CHF 605.5 billion.[532] The 249 funds included in the sample account for CHF 385.9 billion in invested assets. The sample therefore covers 63.7% of the market. As

[529] For a copy of the SPFS 2008 see section 8.1.

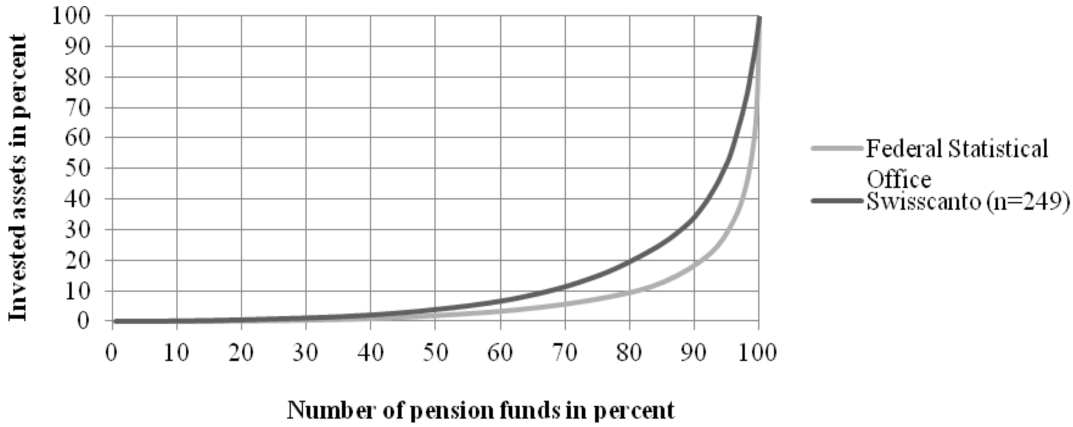
[530] See Swisscanto (2009)

[531] Data from the Federal Statistical Office and Swisscanto Survey date both from the end of 2007.

[532] See Federal Statistical Office (2009, p. 15)

shown in Figure 36, pension fund assets are concentrated in a relatively small number of very large pension funds. This holds for both the total pension fund population determined by the FSO as well as for our sample. However, with an average pension fund size of CHF 1.57 billion[533] compared to the average size of the total pension fund population of only CHF 0.24 billion our sample is clearly biased towards larger institutions.

FIGURE 36 – IA BY SURVEYED PENSION FUNDS



Source: Federal Statistical Office (2009, p. 11) and Swisscanto 2008

Also, in our sample public pension funds, which on average are larger than their private counterparts, are over-represented. According to the FSO, private institutions account for the large majority of pension funds in Switzerland, with a total of 2’445 funds at the end of 2007 compared to only 98 public funds. In contrast, our sample consists of 203 private funds (8.3% of all private funds) and 46 public institutions (46.9% of all public funds). Thus, whereas public institutions account for only 3.9% of all pension funds, they account for 18.5% in our sample. Similar disparities exist with regard to the preferred plan type. Whereas in the population there are 2’265 pension funds that operated a DC plan and only 278 funds with a DB plan[534], in our sample there are 186 funds with a DC plan (8.2% of all DC plans) and 58 pension funds with a DB plan (20.9% of all DB plans).[535] Whereas DB plans account for only 10.9% of all pension funds, they account for 23.3% in our sample. Partly this overrepresentation of DB plans can be explained by the overrepresentation of public funds of which 58.7% apply a DB plan in contrast to only 15.7% of private pension funds (see Table 19). In order to take account of the overrepresentation of public funds, in the following bivariate analysis (see section 5.4.2) we distinguish between public and private institutions. In addition, we control for these three aspects in the multivariate logistic regression analysis in section 5.4.3.

[533] This figure only includes the 245 funds that have reported their portfolio size.
[534] See Federal Statistical Office (2009, p. 13)
[535] Five pension funds have not reported a specific plan type.

TABLE 19 – SAMPLE DISTRIBUTION OF PLAN TYPE BY LEGAL FORM

Plan type		Public pension funds	Private pension funds
DC plan	Frequency	19	167
	In percent	41.3	84.3
DB plan	Frequency	27	31
	In percent	58.7	15.7

Source: based on data from the Swisscanto pension fund survey 2008

Another difficulty related to the data concerns a potential response bias, which may influence the quality of the data and its comparability. For example, the answers to the questionnaire have been provided by individuals employed in differing functions within the pension funds (e.g. board members, representatives of the management or the administrative body) and with different levels of seniority. This may impact the quality and comparability of the responses. However, to the extent that they have been requested to answer the questionnaire on behalf of the pension fund, we can assume that their views represent the views of the governing body of the pension fund board and not their own personal views. Also, it has to be noted that the survey has not included any background or guidance material which would have introduced SRI as a topic (e.g. SRI definition or glossary of terms), thereby presuming a substantial knowledge of SRI among survey participants. In cases where no familiarity with SRI exists, this lack of guidance could have lead to misinterpretations of what is meant by this form of investing.[536] In cases where outliers have been identified, they have (where possible) been corrected or excluded from the final sample. Another difficulty related to the data refers to missing values, as various questions have been answered by only a small number of funds. This holds especially for the SRI-related questions, which have mainly been answered by funds that exhibit positive SRI behavior. For those variables where additional data has been derived from the funds' website or annual reports, we have only a limited number of cases since not all funds disclose the required information externally. To the extent that there has been little opportunity to complement the missing data through additional interaction with the survey participants, we will insert a number of assumptions for those measures where we have a low response rate in order to be in a position to conduct a multivariate logistic regression analysis.[537]

5.3. VARIABLE DESCRIPTIONS

Taking consideration of the richness of the data, the following sections provide a detailed description of the dependent variable and the explanatory variables that we use as proxies for the determinants described in chapter 4. We also include a description of their corresponding metrics as well as the sources of information on which the variables are based. Since the underlying survey used was not specifically designed for our project, some of the hypotheses we have

[536] As can be evidenced by some of the responses, some funds misunderstood what was meant by SRI
[537] It was agreed with Swisscanto that no follow up interviews would be carried out with the participating funds in order to avoid general questionnaire fatigue.

developed in chapter 4 cannot be tested by relying on this set of data. Also, it has to be noted that some of the measures chosen are rather rough approximations of the described pension fund characteristics, which limits the capacity to derive clear-cut conclusions in chapter 6.

5.3.1. Dependent Variable

We defined SRI investors as those pension funds which indicated in their response to question 13.22 and questions 33.1 – 33.59 in the 2008 SPFS that they practice SRI in some form (see section 3.2.1.1). As such our dependent variable "SRI behavior" is not numerical but categorical in nature and consists of two mutually exclusive outcomes: $Y_i = 1$ indicating positive SRI behavior and $Y_i = 0$ the absence of any sort of SRI behavior.

5.3.2. Independent Variables

We have a mixture of regressors measured at the interval level and categorical (dichotomous) regressors.

5.3.2.1. Stakeholder Variables

To measure the financial expectations of pension fund representatives with regard to SRI we referred to three questions from SPFS 2008 which address expectations on the long-term performance, costs and risks characteristics of SRI. Question 33.54 asked participants if they think that the consideration of SRI criteria will lead to higher long-term performance. Questions 33.55 and 33.56 ask if the participants think that costs and risks resulting from SRI are too high. For each question Swisscanto provided predetermined answers ('agrees', 'does not agree', 'no response'), which we transferred into a nominal scale of 1 if the pension fund agrees and 0 if it does not. Unfortunately, out of the 249 funds in the sample on average only about a fifth answered these questions (20.5%, 19.3% and 21.3%), of which most are from the SRI investors group (88.2, 87.5 and 88.7%). In order to increase the overall number of cases for our subsequent analysis, some assumptions were made for the non-SRI investing pension funds. As their view can generally be expected to be more negative than the view of those that engage in SRI (see Figure 37) those non-SRI investing funds that have not responded were reclassified to "does not agree" for question 33.54 and "agree" for question 33.55 and 56 (see Table 21).[538] In addition, in order to be able to consider the performance related variable in our multivariate analysis, we adjusted two funds that have positive views with regard to costs and risks but did not answer the performance related question, by changing their responses with regard to the long-term performance expectations from "no response" into "agree".

As there is no information included in SPFS 2008 on the size of pension fund boards or the demographic characteristics of board members, we derived data from additional sources. To measure the size of pension boards and board membership qualifications we include data from SPFS 2007 (37.1, 37.12) assuming continuity from 2007 to 2008 regarding these two variables. For the latter we use the criteria if board members are elected on the basis of their professional qualifications as a proxy for their level of education and understanding of SRI.

[538] Results will be tracked separately prior to these adjustments.

Thereby, we assume that trustees hired on the basis of professional qualifications are more familiar with the characteristics of SRI than trustees who are not. As a measure, we use an ordinal scale with the value of 0 if board members are not elected on the basis this criteria and 1 if employer and / or employee representatives are. Data on the percentage of women in pension fund boards was retrieved from the 2007 annual reports of the funds where available. Finally, no data exists on the age of board members, income level and their personal lifestyle, as a result of which these cannot be tested.

The influence of the employer on the SRI behavior of the pension fund was assessed by reference to a question in SPFS 2008 (33.51), which asks participant funds with a SRI strategy if their SRI engagement is a consequence of the disposition or the mission of their employer. Unfortunately, the response rate to this question was very low, which suggests that this factor does not play any role. For verification purposes, a series of alternative measures was developed. First, based on the answers to question 11 of SPFS 2008 and additional information from the websites of the employers, a dummy variable was defined that takes on the value 1 if an employer has a religious, union, educational, health, social or cultural background and 0 otherwise. Second, another dummy variable takes the value of 1 if a corporate employer has a CR strategy. Here, the focus is only on private funds with closed membership, as in the case of open membership funds it is unclear who the corresponding pension funds are and if they have a CR strategy. In order to test for the inverse relationship, a third variable takes the value of 1 if the company can be considered as “sin-company” according to traditional exclusion criteria (e.g. involved in alcohol, gambling, tobacco, nuclear, see also section 2.3.1) or has been confronted with controversies around environmental or human rights issues[539]. Again the focus is only on private funds with closed membership. Finally, a fourth dummy variable related to the disposition of the employer takes the value of 1 if it is a private and 0 if it is a public fund.

To examine the postulated hypotheses regarding the role of beneficiaries in the decision of pension funds to engage in SRI, we refer to two variables based on questions included in SPFS 2008. A first variable measures if the SRI behavior of a fund is the result of an explicit request by its beneficiaries (33.52). A second variable refers to the perception of trustees of whether SRI is in the best interest of their beneficiaries (33.53). As for the above question on performance, costs and risks related to SRI, Swisscanto provided predetermined answers (‘agrees’, ‘does not agree’, ‘no response’), which we transferred into a nominal scale of 1 if the pension fund agrees and 0 if it does not. Again, responses involve a self-selection bias as mainly pension funds with a positive SRI behavior answered these questions.[540] As in the case of the variable on the long-term financial performance of SRI (33.54), for the variable cover-

[539] To check for an employer’s exposure to environmental or social controversies, we used RepRisk (www.reprisk.com) a web-based database allowing for the identification of environmental and social controversies around companies.

[540] The way question 33.52 is formulated only pension funds that engage in SRI are able to provide an answer.

ing the question whether SRI is deemed to be in the best interest of the beneficiaries, we adjust non-SRI investors that have not answered into “does not agree”.

Finally to measure the impact of the reliance of pension funds on external investment consultants, we refer to data included in their 2007 annual reports (where available). It has to be noted that the quality of the resulting measure is limited as by the end of 2007 there was no reporting requirement for pension funds with regard to the employment of external investment consultants.[541] As a result, it is not clear whether those funds that do not report about the use of investment consultants really abstain from using such services. Despite this shortcoming, we include a dummy variable that takes on the value of 1 if there is evidence that a fund relies on the services of an investment consultant and 0 if there is no evidence for this. To the extent that none of the consultants referenced in the reports is known for their SRI expertise, we suggest in line with hypothesis 6 that their presence acts as an obstacle for pension funds to engage in SRI.[542] To the extent that for a large number of pension funds we do not have any information to verify their reliance on such consultancy services we do not include these funds in our analysis.

5.3.2.2. Portfolio Variables

The measure for pension fund size is determined by the natural logarithm of fund total assets in order to minimize the impact of extreme values. Information on the size of pension funds was derived from the standard section of SPFS 2008 (8.1). The risk taking capacity of pension funds is measured by referring to the coverage ratio of the funds defined in SPFS 2008 as total assets divided by liabilities (15.1). The long-term thinking of pension funds could be measured in different ways, such as the average duration of pension fund liabilities[543], the frequency of performance evaluation within which investment returns are considered, the rate of asset turnover (that is, the average holding period of corporate stock or investment products) or by the discount rate at which pension funds price assets over the long term. Unfortunately, neither SPFS 2008 nor 2007 nor the annual pension fund reports contain information on these measures. Instead, we refer in SPFS 2008 to the extent the portfolio is indexed (13.21) to get an alternative measure for whether a fund has a long-term investment perspective.[544] This assumes that pension funds applying a passive indexing strategy (which consist of a buy and hold approach) are more long-term oriented than pension funds following an active strategy which consists of buying and selling assets on the assumption of beating the market.

[541] At its first session in 2010, the Swiss parliament agreed that in the future Swiss pension funds will be required to name their asset managers and advisers in their annual reports.

[542] Apart from a few specialized consultancies (e.g. onValues or Conser Invest), there is very little evidence that investment consultants working with pension funds have such expertise and proactively offer corresponding services.

[543] See Ryan, Schneider (2002), Cox et al. (2004, p. 30), Hesse (2008)

[544] See Hawley, Williams (2000, p. 7)

The same measure could also be used to test for the influence of the level of portfolio diversification on the SRI behavior of pension funds. That is, instead of determining the average number of corporate holdings included in a pension portfolio (for which no information exists) one could alternatively refer to the fraction of the portfolio that invested passively. This measure builds on the assumption that passively indexed portfolios tend to cover a greater number of companies, eventually representing a cross section of publicly traded equities, contrary to actively managed portfolios that are usually restricted to a limited number of stocks. Finally, the degree of leverage a pension fund has on the management of a firm would best be measured as the average percentage of stock ownership held by pension funds. However, neither SPFS 2007 nor SPFS 2008 disclose such information, nor do pension funds generally report their individual corporate holdings on their websites or within their annual reports.[545] Alternatively, one could again refer to the percentage of the indexed portfolio to get a measure of the size of corporate holdings, assuming that a large fraction of the portfolio indexed leads pension funds to own a relatively large number of stocks and consequently to own only small fractions of each company's outstanding stock.

5.3.2.3. Institutional Variables

To measure the reliance of a pension fund on external asset managers we refer to the level of the portfolio managed externally reported in SPFS 2008 (13.43). For the other institutional variables we again construct different binary measures representing an either / or condition. For the level of disclosure attributed to the beneficiaries of a pension fund, we refer to an item included in SPFS 2007 (38.3) which asks whether the pension fund regularly informs the beneficiaries of its investment practices (1) or not (0). Regarding the role of the administrative form, we include a dummy variable based on question 6 in SPFS 2008 that takes 1 in the case of open membership (pooled or open joint foundations) and 0 if a fund has closed membership (single employer funds, closed collective foundations). Finally to assess the role of the funding obligations we distinguish between DB (1) and DC (0) plans based on question 9 in SPFS 2008.

[545] Rare examples of pension funds which provide detailed information on their corporate holdings include the NGPF and the two large Dutch funds ABP and PGGM.

TABLE 20 – TESTABLE VARIABLES

Characteristics	Hypothesis		Metric	Source of data
SRI perception of the board of trustees	H1.1	A positive perception of PF trustees regarding SRI in terms of long-term performance will positively impact the SRI behavior of the PF.	Dummy = 1 if PF agrees	SPFS 2008, 33.54
	H1.2	A negative perception of PF trustees regarding costs resulting from SRI will negatively impact the SRI behavior of the PF.	Dummy = 1 if PF agrees	SPFS 2008, 33.55
	H1.3	A negative perception of PF trustees regarding risk levels resulting from SRI will negatively impact the SRI behavior of the PF.	Dummy = 1 if PF agrees	SPFS 2008, 33.56
Board demographics	H2.1	PF boards that are composed of members that are elected on the basis of their professional qualifications are more likely to promote SRI criteria.	Dummy = 1 if election of employee and / or employer representative is based on professional qualifications	SPFS 2007, 37.12
	H2.3	PFs that include a higher percentage of women in their governing body are more likely to engage in SRI.	Percentage of women in PF boards	2007 PF annual reports
Board size	H3	PFs with smaller boards are more likely to invest in SRI than PFs governed by larger decision-making bodies that require more transparent decision-making.	Number of board members	SPFS 2007, 37.1
Disposition of employer (E)	H4.1	SRI is more likely among PFs where the E has a religious, union, educational, health, social or cultural background.	Dummy = 1 if E has a mission background	SPFS 2008, 11 and E websites
	H4.2	Among private pension funds SRI is more likely when the sponsoring employer has established a CR agenda.	Dummy = 1 if the E has a CR strategy or program	E websites
	H4.3	SRI is less likely among private PFs whose E is active in a sector which is targeted by SRI investors or involved in controversies around environmental or social issues.	Dummy = 1 if E is active in a sector which is targeted by SRI investors	E websites
	H4.4	Public PFs are more likely to engage in SRI than private PFs.	Dummy = 1 if PF is a private institution	SPFS 2008, 2.1 - 2.4
Role of beneficiaries	H5.1	PFs that have been confronted by an explicit request to engage in SRI by their beneficiaries are more likely to invest in SRI.	Dummy = 1 if PF agrees	SPFS 2008, 33.52
	H5.2	PFs whose representatives view SRI as being in the best interest of their beneficiaries will be more likely to invest in SRI.	Dummy = 1 if PF agrees	SPFS 2008, 33.53
Role of investment consultants	H6	PFs that employ investment consultants and which have no established SRI capabilities are more unlikely to engage in SRI.	Dummy = 1 if there is evidence that a PF uses investment consultants and 0 if there is no evidence for this.	Data derived from 2007 annual reports

Characteristics	Hypothesis		Metric	Source of data
Portfolio size	H7	Larger PFs are more likely to engage in SRI than smaller PFs.	Log of total IA	SPFS 2008, 8.1
Risk-taking capacity	H8.1	PFs without a positive perception of SRI with regard to long-term financial performance will be more likely to invest in SRI when they are fully funded.	Coverage ratio defined as total assets divided by the fund's liabilities	SPFS 2008, 15.1
	H8.2	Underfunded PFs will be more likely to invest in SRI when they have a positive perception of SRI.		
Investment horizon	H9	PFs with longer investment horizons tend to engage more in SRI than those PFs with shorter investment horizons.	Percentage of portfolio indexed	SPFS 2008, 13.21
Portfolio diversification	H10	The more a PF portfolio is diversified, the higher the interest of the PF in factoring in externalities that impact the value of the other assets in the portfolio by engaging in SRI.	Percentage of portfolio indexed	SPFS 2008, 13.21
Investment concentration	H11	PFs with large and concentrated holdings in a single company are more likely to engage in SRI than dispersed shareholders.	Percentage of portfolio indexed	SPFS 2008, 13.21
Reliance on external asset managers	H12	PFs in which investment decisions are delegated to outside professionals will be more likely to invest in SRI.	Percentage of portfolio managed externally	SPFS 2008, question 13.43
Level of disclosure	H13	PFs that inform their beneficiaries of their investment strategy and decisions are more likely to engage in SRI.	Dummy = 1 if PF informs beneficiaries on investment practices	SPFS 2007, question 38.3
Administrative form	H14	Open PFs are more likely to invest in SRI than PFs with only restricted membership.	Dummy = 1 if PF is a fund with only restricted membership	SPFS 2008, question 6
Plan type	H15.1	PFs with a DB plan are more likely to engage in SRI when they have a positive perception of SRI.	Dummy = 1 if PFs is a DB fund	SPFS 2008, question 9
	H15.2	Among the PFs without a positive financial perception of SRI, DC plans are more likely to invest in SRI than DB plans..		

This table presents the selected stakeholder, portfolio and institutional variables, metrics and corresponding sources of data. It does not include those hypotheses for which no information is available (e.g. H2.2 (age) and H2.4-5 (income level and personal disposition towards cause related activities).

5.4. Methodology and Summary Statistics

Within the following sections, we test the hypotheses developed in chapter 4 by exploring which variables affect the probability of a fund to engage in SRI. We start with a short discussion of how an ideal experiment would look to best determine the predictive capability of certain pension fund characteristics on the SRI behavior of pension funds, taking account of the limitations in the data available (see section 5.4.1). To analyze the differences between pension funds that engage in SRI from those that do not, we apply a stepwise approach starting with bivariate analysis of the individual relationships between the independent variables and the dependent variable (see section 5.4.2). Although the bivariate tests give initial insight into the SRI behavior of Swiss pension funds, they do not provide clear-cut evidence of the extent to which the characteristics described influence the decision to engage in SRI. The insights gained from the bivariate analysis will be used as a basis to conduct a multivariate regression analysis in which we simultaneously examine a selection of possible determinants of the SRI behavior of Swiss pension funds (see section 5.4.3). In order to give a more detailed view of our sample, each step is accompanied by summary statistics of the variables used. Based on the findings in this sub-section, a detailed discussion of the empirical results is undertaken in chapter 6.

5.4.1. Strategy of Inquiry

To examine possible determinants of the SRI behavior of Swiss pension funds causal relationships have been investigated by means of quantitative methodologies (e.g. case studies and interviews).[546] In contrast, quantitative strategies which construct statistical models explaining or predicting pension fund behaviors do not exist in the Swiss context. To a large extent this is due to limited disclosure by Swiss pension funds in the past, but is also due to the low number of reported cases that effectively engaged in SRI, making quantitative analysis difficult. Although there are some good reasons for using qualitative research (e.g. by providing a more in-depth and rich description of causal relationships and exploration of processes), for the purpose of measuring the predictive capability of certain pension fund characteristics quantitative methodologies seem more appropriate.[547]

Under a quantitative approach, the ideal way to explore such relationships would be to build the analysis on multi-dimensional or panel data containing observations on multiple pension fund characteristics observed over a defined time frame. Here, the combination of time series with cross-sections would be best suited to investigate the behavior of pension funds as it offers advantages in the analysis of possible causal relationships by studying the dynamics of change over time[548]. It avoids the problem of endogeneity by using lagged explanatory variables. However, although the thesis research questions show a strong rationale for pursuing a

[546] See Schumacher Hummel (2004), Oesch (2000), Sigg et al. (2005), UNPRI (2009)

[547] Despite this preference for quantitative methods, in this thesis findings from existing qualitative studies have been used in to formulate the testable hypotheses (see chapter 4).

[548] See Gujarati (2003, p. 638)

panel data strategy, a number of reasons related to the data quality support the choice of a one-dimensional cross section of data instead. First, as indicated in Figure 27, the participation rate of pension funds in the Swisscanto survey instrument has been rather unstable, resulting in a varying set of pension fund responses over time and only a small number of pension funds that have consistently responded to all annual surveys.[549] Obviously, focusing on only those cases would render an empirical analysis difficult. Furthermore, many of those funds that have responded to all questionnaires have done so in an inconsistent way, resulting in numerous missing values. To the extent that we require a set of collectively exhaustive events in order to conduct our analysis (meaning that only cases with non-missing values will be used), applying a panel data approach would lead to even lower numbers of valid cases. Finally, there was a substantial measurement error in the response variable prior to the 2008 survey, which would cause the explanatory power of any model based on panel data to be severely limited. As shown in section 3.2.1.1 this measurement error results from the fact that many funds that actually engage in SRI have not responded to the respective question in the survey instrument during 2003 to 2008. This can be evidenced by referring to the more detailed SRI section included exclusively in SPFS 2008 (see questions 33.1 to 33.59) and which shows that the SRI behavior of the funds is much more developed than indicated solely by the responses to the standard SRI question (13.22) included in the survey instruments since 2002. Therefore, in order to preserve a sufficient number of cases and to avoid a reduction of the explanatory power of the model, we abstain from using a panel data approach and instead apply a cross-sectional approach, which focuses exclusively on the data from SPFS 2008.[550] It must however be acknowledged that this approach also has limitations, to the extent that intertemporal linkages in the statistical associations that are important for the causal understanding of the influence of pension fund characteristics of the SRI behavior of a fund are ignored. Thus, except for some specific variables where respondents explicitly report on the internal drivers of SRI (e.g. trustee perception of SRI, role of the sponsoring institution and the fund beneficiaries) we lack evidence for causality.

5.4.2. Bivariate Analysis

In a first stage we use bivariate regression analysis to study the dependence of the SRI behavior of pension funds on each of the independent variables developed in chapter 4 without controlling simultaneously for other factors. Using a set of linear models, we are saying that the probability of pension funds to engage in SRI is a linear function of various explanatory variables. As in Cumming and Johan, we use this initial step to gain initial insight into the rela-

[549] Partly this can be explained by the general consolidation of the Swiss pension fund market, which led various funds to disappear or to merge with other funds over time and (although to a lesser extent) new ones to be created.

[550] Another reason to focus on a cross-section approach is that there is a lack of data prior to 2008, as various independent variables are measured on the basis of the data generated by the special section in SPFS 2008. Furthermore, following a panel data approach would substantially impact the number of cases in the sample available for our analysis which would further reduce the explanatory power of the model.

tionship between the variables prior to conducting the multivariate analysis.[551] As such it helps us to determine which variables can be used for the multivariate analysis and which variables have to be omitted due to either a limited number of cases or low levels of significance. Moreover, it also tells us which variables have to be treated separately in a multivariate stage due to problems of collinearity between the independent variables. As a consequence of the overrepresentation of public pension funds in our sample, the subsequent bivariate analysis distinguishes between private and public pension funds. Table 21 and Table 22 provide a detailed overview of the overall sample and the two sub-samples by summarizing the frequency of observations and presenting correlations and the statistical significance. Table 23 provides the correlation matrix of the relationships examined.

Results included in Table 22 show that an engagement in SRI is observed more often among pension funds that have a positive perception of SRI in terms of long-term financial performance (H1.1), costs (H1.2) and the risks involved (H1.3). The relationship is particularly robust with regard to the of long-term performance expectations for SRI. That is, whereas results for H1.2 and H1.3 became significant only after the additional assumptions were included (for those non-SRI investors that have not responded to the respective question, see section 5.3.2.1), the result for H1.1 was already significant in its original form (see values included in squared brackets in Table 22). With regard to board characteristics, findings are less clear. First, no significant relationship can be identified between the qualification of board members (H2.1) and the SRI behavior of the pension funds. In contrast, we find a significant positive relationship between female representation (H2.3) with pension fund boards and the SRI behavior of the funds. In addition, SRI is observed more often among funds with larger decision-making bodies (H3). Both relationships are significant for the overall sample and the public funds, but are not significant for the private sub-sample. With regard to the role of the employer, no significant relationship can be determined between the mission background of the employer (H4.1) and the SRI behavior of the fund or whether the company concerned can be considered as a sin stock from the perspective of a traditional SRI investor (H4.3). However, it has to be noted that in both cases the results seem to be impacted by the relatively low number of cases. Interestingly and rather strikingly, results are significant for H4.2, which shows that among private pension funds with closed membership, SRI is observed more often in cases where the corresponding employer displays some sort of CR strategy or practices. Finally, the result for H4.4 shows that SRI is more common among public pension funds than among private funds. With regard to the role of the beneficiaries, results for H5.1 and H5.2 show that an engagement in SRI is observed more often among those pension funds that have either been explicitly requested by their beneficiaries to engage in SRI, or where trustees consider SRI to be in the best interest of the beneficiaries.[552] For both variables, results were already significant prior to the additional assumptions being made. Finally, we find a negative

[551] Cumming, Johan (2007, p. 403)

[552] The latter item is independent of whether trustees interpret the best interest in financial or ethical terms (see section 6.1.3).

statistical association between the presence of investment consultants (H6) and the disposition of pension funds towards SRI. However, except for the public subsample, these relationships are not statistically significant.

Second, the results for the proposed portfolio variables are also interesting, as SRI is observed more often among larger pension funds (H7) and those funds that have part of their portfolio indexed (H9 – 11). Regarding the latter, the proposed relationship holds for the entire sample and the public subsample but not for private institutions. Concerning the role of the funding levels of pension funds, an inverse significant relationship exists for the overall sample, indicating that SRI is observed more often among those funds that are underfunded. The result for H8.1 shows that among those pension funds that do not have a positive perception of SRI (which we call 'skeptics'), SRI is more common among underfunded funds, which goes against the proposed relationship. Finally, despite the very low number of cases, the result for H8.2 shows that among underfunded pension funds SRI is more frequent when they have a positive perception of this form of investing. For both H8.1 and H8.2 the relationships are only significant for the overall sample but not for the subsamples.

Third, results regarding the institutional variables show that SRI is observed more often among those funds that do not rely on external asset managers (H12). This result also holds for the private funds, but not for the public institutions. No overall significant relationship is determined for the level of disclosure of pension funds (H13) and whether the funds are open or closed for external membership (H14). However, regarding H13, the relationship is significant with regard to the public subsample. Finally, SRI is more common among DB plans. Here, the result for H15.1 further shows that in line with the hypothesis for the overall sample as well as the private sub-sample SRI is more common among DB plans when they have a positive perception of SRI. Also the result for H15.2 shows that among the 'skeptic' pension funds SRI is observed more often when they have a DC plan in place. However, this last relationship holds only for the public sample, but not for the overall or the private sub-sample.

TABLE 21 – SUMMARY STATISTICS

Hypotheses		Response categories	Total sample				Public pension funds				Private pension funds			
			non-SRI investors		SRI investors		non-SRI investors		SRI investors		non-SRI investors		SRI investors	
			N	In %	N	In %	N	In %	N	In %	N	In %	N	In %
SRI behavior			168	67,5	81	32,5	12	26,1	34	73,9	156	76,8	47	23,2
1.1	Performance expectations	does not correspond	142 [6]	90,4 [28,6]	15	9,6 [71,4]	7 [1]	53,8 [14,3]	6	46,2 [85,7]	135 [5]	93,8 [35,7]	9	6,3 [64,3]
		corresponds	2 [0]	6,3 [0]	30	93,8 [100]	0	0	17	100	2 [0]	13,3 [0]	13	86,7 [100]
1.2	Cost expectations	does not correspond	4	10,3	35	89,7	0	0	19	100	4	20	16	80
		corresponds	164 [2]	95,9 [22,2]	7	4,1 [77,8]	12 [0]	85,7 [-]	2	14,3 [100]	152 [2]	96,8 [28,6]	5	3,2 [71,4]
1.3	Risk expectations	does not correspond	5	10,4	43	89,6	0	0	23	100	5	20	20	80
		corresponds	163 [1]	97,6 [20]	4	2,4 [80]	12 [0]	92,3 [0]	1	7,7 [100]	151 [1]	98,1 [25]	3	1,9 [75]
2.1	Qualification	no	27	54,0	23	46,0	3	20,0	12	80,0	24	68,6	11	31,4
		yes	83	66,4	42	33,6	7	31,8	15	68,2	76	73,8	27	26,2
4.1	Mission	no	161	68,5	74	31,5	10	23,8	32	76,2	151	78,2	42	21,8
		yes	7	50,0	7	50,0	2	50,0	2	50,0	5	50,0	5	50,0
4.2	CR agenda (only privates / closed)	no	79	86,8	12	13,2	0	-	0	-	79	86,8	12	13,2
		yes	48	67,6	23	32,4	0	-	0	-	48	67,6	23	32,4
4.3	Sin stock (only privates / closed)	no	129	79,1	34	20,9	0	-	0	-	129	79,1	34	20,9
		yes	11	68,8	5	31,3	0	-	0	-	11	68,8	5	31,3
4.4	Legal form	public	12	26,1	34	73,9	12	26,1	34	73,9	0	-	0	-
		private	156	76,8	47	23,2	0	-	0	-	156	76,8	47	23,2
5.1	Requested by beneficiaries	does not correspond	144 [8]	85,2 [24,2]	25	14,8 [75,8]	7 [1]	46,7 [11,1]	8	53,3 [88,9]	137 [7]	89,0 [29,2]	17	11,0 [70,8]
		corresponds	0	0,0	18	100,0	0	0,0	12	100,0	0	0,0	6	100,0
5.2	Beneficiaries interest	does not correspond	143 [8]	92,3 [40]	12	7,7 [60]	7 [1]	53,8 [14,3]	6	46,2 [85,7]	136 [7]	95,8 [53,8]	6 [6]	4,2 [46,2]
		corresponds	1	2,6	37	97,4	0	0,0	20	100,0	1	5,6	17	94,4

(continued)			Total sample				Public pension funds				Private pension funds			
Hypotheses		Response categories	non-SRI investors		SRI investors		non-SRI investors		SRI investors		non-SRI investors		SRI investors	
			N	In %	N	In %	N	In %	N	In %	N	In %	N	In %
6	Use of investment consultants (IC)	no evidence for ICs	15	39,5	23	60,5	0	0,0	14	100,0	15	62,5	9	37,5
		evidence for ICs found	11	44,0	14	56,0	5	29,4	12	70,6	6	75,0	2	25,0
8	Coverage ratio	underfunded	7	30,4	16	69,6	4	21,1	15	78,9	3	75	1	25
		fully funded	157	71,4	63	28,6	8	29,6	19	70,4	149	77,2	44	22,8
8.1	'Skeptics'	underfunded	7	46,7	8	53,3	4	33,3	8	66,7	3	100	0	-
		fully funded	155	79,1	41	20,9	8	47,1	9	52,9	147	82,1	32	17,9
8.2	Underfunded funds	'skeptics'	3	60,0	2	40,0	1	33,3	2	66,7	2	100	0	-
		'convinced'	0	-	8	100	0	-	7	100	0	-	1	100
9 - 11	Portfolio indexation[553]	no	131	75,3	43	24,7	10	43,5	13	56,5	121	80,1	30	19,9
		partly indexed	37	49,3	38	50,7	2	8,7	21	91,3	35	67,3	17	32,7
13	Level of disclosure	does not inform	50	70,4	21	29,6	7	50,0	7	50,0	43	75,4	14	24,6
		informs beneficiaries	64	56,6	49	43,4	3	11,5	23	88,5	61	70,1	26	29,9
14	Administrative form	open membership	15	53,6	13	46,4	0	0,0	6	100,0	15	68,2	7	31,8
		closed membership	152	69,4	67	30,6	12	30,0	28	70,0	140	78,2	39	21,8
15	Plan type	defined contribution	137	73,7	49	26,3	8	42,1	11	57,9	129	77,2	38	22,8
		defined benefit	27	46,6	31	53,4	4	14,8	23	85,2	23	74,2	8	25,8
15.1	Defined benefit	'skeptics'	20	80	5	20	0	-	5	100	20	100	0	-
		'convinced'	1	6,3	15	93,8	0	-	11	100	1	20	4	80
15.2	'Skeptics'	defined benefit	20	80	5	20	0	-	5	100	20	100	0	-
		defined contribution	118	92,9	10	7,8	7	87,5	1	12,5	111	92,5	9	7,5

This table presents distributions for the dichotomous variables grouped by the legal form of the pension funds. Values in squared brackets represent results prior to the assumptions made for those non-SRI investors that have not responded to the corresponding questions (see 5.3.2.1). Responses for H8.1 and H15.2 focus on all funds that do not have a positive view with regard to the long-term outperformance of SRI (see H1.1). This also includes those funds that have not responded to this question (see Figure 37). By 'convinced' funds, we refer to those funds that have a positive view regarding the long-term outperformance of SRI.

[553] In this table, portfolio indexation has been included in the dichotomous form.

TABLE 22 – DESCRIPTIVE STATISTICS

Variable name		Sample	Cases	Minimum	Maximum	Mean	S.D.	Correlation	Exact sig. (2-sided)
SRI behavior			249	0	1	,33	,469		
1.1	Performance expectations	all funds	189 [51]	0	1	,17 [,59]	,376 [,497]	,741 [,436]	,000 [,003]
		public / private funds	30 / 159	0	1	,57 / ,09	,504 / ,293	,631 / ,681	,001 / ,000
1.2	Cost expectations	all funds	210 [48]	0	1	,81 [,19]	,390 [,394]	-,833 [-,141]	,000 [,312]
		public / private funds	33 / 177	0	1	,42 / ,89	,502 / ,317	-,881 / -,752	,000 / ,000
1.3	Risk expectations	all funds	215 [53]	0	1	,78 [,09]	,417 [,295]	-,878 [-,088]	,000 [,465]
		public / private funds	36 / 179	0	1	,36 / ,86	,487 / ,348	-,941 / -,809	,000 / ,000
2.1	Qualification	all funds	175	0	1	,71	,453	-,116	,166
		public / private funds	37 / 138	0	1	,59 / ,75	,498 / ,437	-,131 / -,051	,481 / ,662
2.3	Female representation	all funds	69	,0	50,0	16,06	11,72	,265	,027
		public / private funds	30 / 39	,0 / ,0	37,5 / 50,0	17,33 / 15,08	10,52 / 12,61	,384 / ,137	,036 / ,407
3	Board size	all funds	200	3	39	8,77	4,151	,311	,000
		public / private funds	44 / 156	4 / 3	39 / 24	11,52 / 8	5,70 / 3,22	,331 / ,152	,028 / ,059
4.1	Mission background	all funds	249	0	1	,06	,231	,091	,238
		public / private funds	46 / 203	0	1	,09 / ,05	,285 / ,217	-,168 / ,145	,276 / ,054
4.2	CR agenda	only private & closed funds	162	0	1	,44	,498	,232	,004
4.3	Sin stock	only private & closed funds	179	0	1	,09	,286	,072	,347
4.4	Legal form	all funds	249	0	1	,82	,389	-,420	,000
5.1	Request by beneficiaries	all funds	187 [51]	0	1	,10 [,35]	,296 [,483]	,597 [,319]	,000 [,039]
		public / private funds	27 / 160	0	1	,44 / ,04	,506 / ,191	,529 / ,482	,008 / ,000
5.2	Beneficiaries interest	all funds	193 [58]	0	1	,20 [,66]	,399 [,479]	,819 [,491]	,000 [,000]
		public / private funds	33 / 160	0	1	,61 / ,11	,496 / ,317	,644 / ,813	,000 / ,000
6	Use of investment consult-ants	all funds	63	0	1	,60	,493	-,045	,796
		public / private funds	31 / 32	0	1	,45 / ,75	,506 / ,440	-,398 / -,114	,048 / ,681
7	Portfolio size	all funds	245	-1,00	4,45	2,463	,884	,339	,000
		public / private funds	46 / 199	1,00 / -1,00	4,45 / 4,35	3,05 / 2,33	,804 / ,847	,477 / ,142	,001 / ,045

Variable name		Sample	Cases	Minimum	Maximum	Mean	S.D.	Correlation	Exact sig. (2-sided)
8	Coverage ratio	all funds	243	57,90	176,40	112,63	13,65	-,201	,002
		public / private funds	46 / 197	57,90 / 79,30	133,70 / 176,40	99,04 / 115,80	16,64 /10,63	-,158 / ,008	,293 / ,908
8.1	‘Skeptics’ / -fully funded	all funds	196	0	1	,93	,258	-,197	,008
		public / private funds	17 / 179	0	1	,59 / ,98	,501 / ,128	-,137 / ,060	,703 / 1,000
8.2	Underfunded / ‘convinced’	all funds	8	0	1	,62	,506	,683	,035
		public / private funds	7 / 1	0	1	,70 / ,33	,483 / ,577	,509 / 1,000	,300 / ,333
9-11	Portfolio indexation	all funds	249	,0	87,50	6,56	15,10	,224	,000
		public / private funds	46 / 203	,00 / ,00	80,00 / 87,50	13,07 / 5,08	21,79 / 12,74	,359 / -,094	,014 / ,184
12	Use of external managers	all funds	186	,00	100	51,49	40,98	-,266	,000
		public / private funds	35 / 151	,00 / ,00	100 / 100	49,24 / 52,01	35,01 / 42,33	-,271 / -,275	,116 / ,001
13	Level of disclosure	all funds	184	0	1	,61	,488	,138	,064
		public / private funds	40 / 184	0	1	,65 / ,60	,483 / ,491	,424 / ,058	,018 / ,570
14	Administrative form	all funds	247	0	1	,89	,318	-,107	,132
		public / private funds	46 / 201	0	1	,87 / ,89	,341 / ,491	-,230 / -,075	,317 / ,290
15	Plan type	all funds	244	0	1	,24	,427	,246	,000
		public / private funds	46 / 198	0	1	,59 / ,16	,498 / ,364	,306 / ,026	,049 / ,817
15.1	DB / ‘convinced’	all funds	16	0	1	,39	,494	,720	,000
		public / private funds	11 / 5	0	1	,69 / ,20	,479 / ,408	- / ,873	- / ,000
15.2	‘Skeptics’ / DC	all funds	128	0	1	,16	,371	,152	,073
		public / private funds	8 / 120	0	1	,38 / ,14	,506 / ,351	,854 / -,107	,005 / ,358

This table presents descriptive statistics for the variables defined in Table 20. For the categorical data and due to small sample sizes a Fisher's exact test is used as a statistical significance test and Pearson's correlation reflects the degree of linear relationship between the SRI behavior and the independent variables. For the interval variables a Pearson’s chi-square test is used instead and Spearman's rho is used to determine the degree of linear relationship between the variables. Values in squared brackets represent results prior to the assumptions made for those non-SRI investors that have not responded to the corresponding questions (see section 5.3.2.1). The original values are not included for the sub-samples of public and private funds. H4.2 and H4.3 include only private funds with restricted membership. Responses for H8.1 and H15.2 focus on all funds that do not have a positive view of the long term outperformance of SRI (see H1.1). This also includes those funds that have not responded to this question (see Figure 37).

TABLE 23 – CORRELATION ACROSS VARIABLES

#	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	SRI behavior	1.00																				
2	Performance expectations	0.78	1.00																			
3	Cost expectations	-0.83	-0.68	1.00																		
4	Risk expectations	-0.88	-0.75	0.88	1.00																	
5	Qualification	-0.09	-0.07	0.12	0.08	1.00																
6	Female representation	0.27	0.13	-0.23	-0.26	0.14	1.00															
7	Board size	0.31	0.26	-0.35	-0.26	0.07	-0.02	1.00														
8	Mission background	0.09	-0.04	-0.09	-0.11	-0.06	0.21	0.07	1.00													
9	CR agenda	0.19	0.17	-0.16	-0.17	0.03	-0.13	0.27	-0.07	1.00												
10	Sin stock	-0.01	-0.11	0.06	0.07	-0.04	-0.15	0.07	-0.06	0.14	1.00											
11	Legal form	-0.42	-0.48	0.43	0.45	0.07	-0.12	-0.35	-0.06	-0.09	0.13	1.00										
12	Request by beneficiaries	0.60	0.54	-0.64	-0.57	-0.25	0.29	0.26	0.27	0.08	-0.08	-0.49	1.00									
13	Beneficiaries' interest	0.82	0.70	-0.62	-0.75	-0.14	0.19	0.20	0.16	0.12	-0.12	-0.47	0.65	1.00								
14	Use of investment consultants	0.05	0.00	-0.08	-0.07	-0.10	0.20	0.05	0.00	0.22	0.21	0.31	0.04	-0.06	1.00							
15	Portfolio size	0.34	0.31	-0.30	-0.30	0.11	0.23	0.63	-0.03	0.33	0.17	-0.33	0.25	0.29	0.15	1.00						
16	Portfolio indexation	0.22	0.21	-0.30	-0.23	0.07	0.20	0.27	0.07	0.07	0.05	-0.21	0.14	0.11	-0.05	0.37	1.00					
17	Coverage ratio	-0.20	-0.30	0.27	0.31	0.00	0.07	-0.31	-0.13	-0.07	0.13	0.42	-0.22	-0.25	0.15	-0.29	-0.17	1.00				
18	Level of disclosure	0.14	0.17	-0.21	-0.24	0.08	0.22	0.18	0.07	-0.01	0.02	-0.04	0.20	0.15	0.25	0.24	0.13	-0.15	1.00			
19	Use of external managers	-0.27	-0.23	0.21	0.23	0.06	0.12	-0.02	0.14	0.08	0.06	0.04	-0.10	-0.26	-0.20	0.06	0.10	-0.07	0.04	1.00		
20	Administrative form	0.05	0.19	0.00	-0.06	-0.01	0.06	-0.01	-0.06	0.03	-0.01	-0.10	0.04	0.06	0.00	0.05	0.15	0.01	0.06	0.07	1.00	
21	Plan type	0.25	0.31	-0.19	-0.32	-0.06	0.19	0.21	0.11	0.08	0.12	-0.40	0.32	0.27	0.04	0.31	0.10	-0.21	0.17	-0.03	0.06	1.00

This table presents correlation coefficients (Spearman's rho) across selected variables as defined in Table 20. The grey shaded correlations are significant at the 5% level.

5.4.3. MULTIVARIATE ANALYSIS: BINARY LOGISTIC REGRESSION

As an extension of the above two-variable case, in this section, a series of binary logistic regressions were used to predict the SRI behavior of Swiss pension funds from the continuous and / or dichotomous characteristics hypothesized in chapter 4. That is, we estimate the probability that a pension fund engages in SRI against the probability of not engaging in SRI by making use of several predictor variables while at the same time controlling for different factors. Table 24 provides an overview of the allocation of variables for the different models.

TABLE 24 – VARIABLES USED FOR MULTIVARIATE STAGE

Variables		Number of cases	Level of significance	Model constituents
1.1	Performance expectations	187	,000 [,003]	included in model 1
1.2	Cost expectations	210	,000 [,312]	included in model 2
1.3	Risk expectations	215	,000 [465]	included in model 3
2.1	Qualification	175	,166	–
2.3	Female representation	69	,027	–
3	Board size	200	,000	included in all models
4.1	Mission background	249	,238	–
4.2	CR agenda	162	,004	included in model 6
4.3	Sin stock	179	,347	–
4.4	Legal form	249	,000	included in model 1 – 5
5.1	Request by beneficiaries	187	,000 [,039]	–
5.2	Beneficiaries interest	193	,000 [,000]	included in model 4
6	Investment consultants	63	,796	–
7	Portfolio size	245	,000	included in all models
8	Coverage ratio	243	,002	included in all models
9-11	Portfolio indexation	249	,000	included in all models
12	Use of external managers	186	,000	included in all models
13	Level of disclosure	184	,064	–
14	Administrative form	247	,132	–
15	Plan type	244	,000	included in all models

This table presents the selection criteria for the variables to be used in the multivariate analysis. The grey shaded areas represent those variables that will not be considered in the subsequent analysis.

To the extent that logistic regression analysis requires a set of collectively exhaustive events, meaning that only cases with non-missing values will be used, in a preliminary step those variables were excluded from the analysis which have a large number of missing values and whose inclusion would cause the overall valid number of cases to decline below feasible levels. This restriction mainly concerns H2.3 and H6, where we have information for only 69 and 63 cases (see second column in Table 24). Furthermore, H5.1 drops out for the multivariate analysis since the underlying question in the survey instrument has been phrased in such a way that we have no positive responses for the non-SRI investors and thus their inclusion would lead to non-meaningful results. Moreover, to the extent that the regression models below should not include any irrelevant predictors, we can further increase the number of valid cases (a minimum of ten cases per independent variable is recommended) by omitting those variables which were already insignificant in the previous section. This concerns H2.1, H4.1, H4.3, H13 and H14 (see third column in Table 24). Finally, to the extent that highly correlated independent variables may affect the results of the multivariate logistic models, we abstain in our model selection strategy from simultaneously including these variables in the same models. As shown in in Table 23, the problem of collinearity exists mainly for those items where we have inserted additional assumptions for those non-SRI investors that have not provided answers to the respective question (see H1.1 – H1.3, and H5.2).

A search for the best model specification was performed by attributing the above selected variables to different models, each with a different combination of explanatory variables. For all models the selected terms are entered in one step. The results of the estimations are provided in Table 25 and are discussed in chapter 6. In total results are displayed for seven different models. Models 1 – 5 focus on the entire sample, whereas models 6 and 7 target specific subsamples. It must be noted that the cases included in the models vary considerably, as we have to exclude cases with missing values from the analysis. As a result, each model has a different number of cases and is therefore based on a different set of pension funds, which partly explains difficulties in comparing results across the different model specifications.

The first three model specifications separately include the variables H1.1 – H1.3 in the regression models in order to cope with the problem of collinearity across these variables. Not surprisingly, the results for these models, which have varying numbers of cases (107 / 115 / 119), are very similar, to the extent that the respective coefficients are overwhelmingly significant. This indicates that pension funds that have positive expectations about the financial performance (in terms of long-term returns, costs and risks involved) are also more likely to engage in SRI. In addition, for all these models the legal form also presents a statistically significant coefficient, suggesting that public institutions are more likely to engage in SRI. In model 4, instead of controlling for the financial perception of pension fund trustees regarding SRI, an alternative variable which addresses whether trustees consider SRI to be in the best interest of their beneficiaries (H5.2), is added to the regression model. The variable is introduced separately as there is a problem of collinearity with H1.1 – H1.3. The model which contains 109 cases suggests that pension funds that consider SRI as being in the best interest of their beneficiaries and that manage a larger proportion of their assets internally are more likely to show a positive SRI behavior. Interestingly, model 4 differs from models 1 – 3 (and also 5) to the extent that the legal form has a statistically insignificant coefficient. The result suggests that the interpretation of SRI as being in the best interest of pension fund beneficiaries leads the legal form to lose its statistical significance. Thus this variable appears to be more important than the legal form. Model 5 differs from the previous model to the extent that it does not include any of the variables H1.1 – H1.3 nor H5.2. When we do not control for any of these characteristics the regression model (which has 147 cases) suggests that public institutions are more likely to exhibit positive SRI behavior. In addition, the model proposes that the larger pension funds are and the lower the percentage of assets they manage externally, the greater the probability that they engage in SRI.

TABLE 25 – LOGISTIC REGRESSION ANALYSIS

		Model 1		Model 2		Model 3		Model 4	
Variable name		marginal effect	t-stat	marginal effect	t-stat	marginal effect	t-stat	marginal effect	t-stat
Constant		2,905	,467	1,924	,182	-1,860	,198	-1,465	,089
1.1	Performance expectations	4.984	16.791***						
1.2	Cost expectations			-6,680	19,106***				
1.3	Risk expectations					-6,548	22,817***		
5.2	Beneficiaries' interest							5,553	20,615***
3	Board size	-,182	,768	-,076	,157	,096	,355	,042	,115
4.4	Legal form	-1,999	4,535**	-2,281	3,620*	-2,656	4,438**	-1,494	2,289
7	Portfolio size	,620	,734	-,015	,000	,194	,063	,587	,783
8	Coverage ratio	-,025	,622	,043	1,253	,062	2,838*	-,005	,018
9-11	Portfolio indexation	,013	,285	-,040	1,938	-,007	,102	,026	1,179
12	External managers	-,016	2,601	-,015	1,627	-,020	2,079	-,021	3,425*
15	Plan type	,355	,193	,888	,872	-,973	,622	-,709	,435
Total cases / missing cases		107 / 142		115 / 134		119 / 130		109 / 140	
Cases dep. variable = 0 /1		74 / 33		86 / 29		86 / 33		74 / 35	
Model 0 / overall %		69,2 / 93,5		74,8 / 95,7		72,3 / 95,0		67,9 / 94,5	
Adjusted R^2		,708		,784		,821		,781	
Log likelihood function		57,557		42,864		40,331		47,819	
Chi-square statistics		74,657***		87,020***		100,183***		89,019***	

		Model 5		Model 6		Model 7	
Variable name		marginal effect	t-stat	marginal effect	t-stat	marginal effect	t-stat
Constant		,269	,014	-3,631	1,069	2,785	,381
3	Board size	-,006	,006	-,070	,439	1,005	1,370
4.2	CR Agenda			1,124	3,824*		
4.4	Legal form	-1,752	9,162***			-2,023	3,941**
7	Portfolio size	,723	3,937**	,572	1,229	1,005	1,370
8	Coverage ratio	-,004	,039	,019	,525	-.029	.750
9-11	Portfolio indexation	-,003	,047	-,022	,513	,008	,088
12	External managers	-,017	9,947***	-,018	7,332***	-,016	2.287
15	Plan type	,354	,558	-,367	,326	,014	,000
Total cases / missing cases		147 / 102		97 / 82		83 / 74	
Cases dep. variable = 0 /1		86 / 61		69 / 28		73 / 10	
Model 0 / overall %		58,5 / 75,5		71,1 / 75,3		88,0 / 91,6	
Adjusted R^2		,352		,241		,237	
Log likelihood function		155,029		98,641		50,134	
Chi-square statistics		44,484***		17,942**		10.935	

This table presents different logistic regression models that estimate the probability of Swiss pension funds to adopt a SRI strategy. The marginal effects are the coefficients of the independent variables. * Indicates significance at the 10% level, ** indicates significance at the 5% level, and *** indicates significance at the 1% level. The grey shaded areas represent the variables that have not been included in the respective model. Overall % reflects the predicted values of the dependent variable based on the full logistic regression model. Under adjusted R^2 we report Nagelkerkes R^2. Chi-square statistics with a significant p-value indicate a better model fit than the empty model (Model 0).

Model 6, which is only about the private institutions with closed membership, explicitly addresses the role of the CR of the employer on the SRI behavior of the corresponding pension fund [H4.2]. The results of this model (which includes only 97 cases) show that the existence of an employer CR agenda is a significant determinant of the SRI behavior of private pension funds with closed memberships. Also, pension funds that use services provided by external asset managers to a lesser extent are more likely to engage in SRI. The model specification does not include the variables H1.1 – H1.3 and variable H5.2, which explains the lower overall model fit compared to models 1 – 5.

Finally in model 7, which has only 87 cases, we target only the 'skeptics', that is those funds that do not have a positive view of the long-term performance of SRI, in order to examine the role of the funding level (H8.1) as well as the plan type (H15.2) on the disposition of the pension funds towards SRI.[554] Results for this model show that neither the funding level nor the plan type can be considered as statistically significant factors for the SRI behavior of Swiss pension funds. As in model 6, the model specification does not include the variables H1.1 – H1.3 or variable H5.2, which explains the lower overall fit of the model.

[554] There are no separate models for H8.2 and H15.1 as the corresponding variables contain an insufficient number of cases.

6. ANALYSIS OF RESULTS

In this chapter we analyze the empirical findings introduced in section 5.4. The following sections contain a summary of the findings from the descriptive statistics as well as the results from the bivariate and multivariate logistic regression analysis. It has to be noted that as a result of the data availability (number of cases) and quality the depth of the analysis varies considerably between the different pension fund characteristics examined. While some pension fund characteristics can be analyzed only at a general level (e.g. the long-term time horizon, degree of portfolio diversification and size of corporate holdings), others can be analyzed more by also considering bivariate results (e.g. female representation, reliance on investment consultants, level of disclosure or administrative form), while others can be also explored in a multivariate setting (e.g. financial perception of SRI, role of beneficiaries and employers, portfolio size, risk taking capacity, and the reliance on external asset managers). Despite this uneven playing field in terms of the quality of the results, in the following sections we attempt to provide an interpretation of the data as well as including recommendations on how demand for SRI can be increased by the various stakeholders concerned.

6.1. STAKEHOLDER CHARACTERISTICS

6.1.1. THE BOARD OF TRUSTEES

To better understand their role on the propensity of a fund to engage in SRI, we have established different measures including how trustees perceive SRI financially, whether members of pension fund boards are selected on the basis of their professional qualifications, the percentage of female representation as well as the size of the pension fund board. As mentioned earlier, pension fund boards have a key role in the decision of how pension funds finally invest their money. As will be shown in the following subsections, the same is also the case when it comes to the decision of a pension fund to engage in SRI.

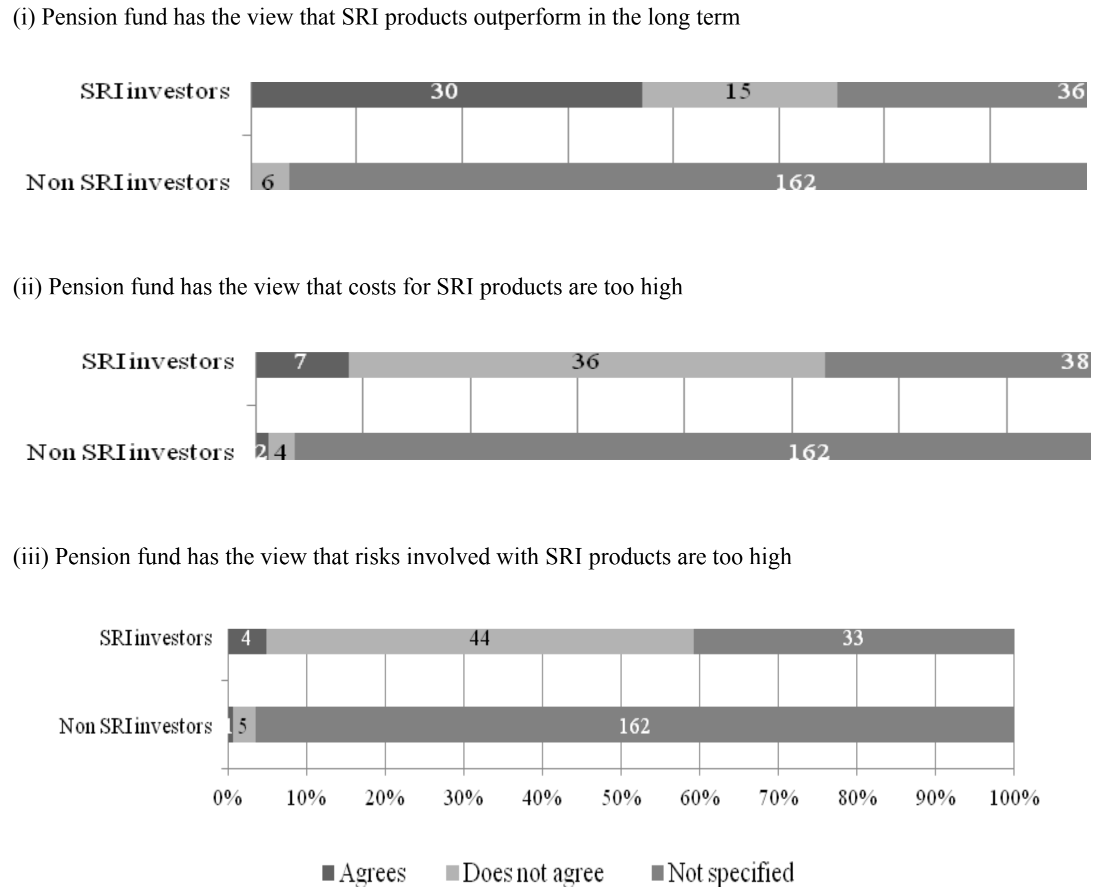
6.1.1.1. FINANCIAL PERCEPTION OF SRI BY PENSION FUND TRUSTEES

As shown in Figure 37, out of the 81 funds that engage in SRI, two thirds of those that responded (45) expect SRI to outperform financially in the long-term. The remaining third do not share this view. However, the way the question is phrased does not mean that they expect SRI to underperform. This rather positive view of SRI among SRI investors is even more pronounced when it comes to expectations about costs and risks. 83.7% of the responding funds (43) do not consider SRI to involve higher costs, while in terms of risk a total of 91.6% do not expect risk to increase when engaging in SRI. Obviously, expectations are different when we look at those funds that do not engage in SRI. Although the response rate among non-SRI investors concerning long-term performance expectations is very low (only 6 funds out of a total of 168), it shows that they are more skeptical which may serve as an explanation for their abstention from SRI.[555] Surprisingly they are less skeptical with regard to costs and risk char-

[555] See Cumming, Johan (2007, p. 400)

acteristics. The few funds that responded display a rather positive view, although still at a lower rate than for SRI investors.[556]

FIGURE 37 – FINANCIAL PERCEPTION OF PENSION FUNDS REGARDING SRI (1)



Source: Based on data from the Swisscanto pension fund survey 2008

Together with the results from the bivariate (Table 22) and multivariate analysis (Table 25, models 1-3) this shows that financial expectations are a significant factor for pension fund trustees engaging in SRI. This is especially so with regard to the views of trustees about the long-term performance of SRI and to a somewhat lesser extent for their views about costs and risks.[557] The long-term performance aspect can probably be considered the most clear-cut indicator on the list of reasons why pension funds pursue SRI strategies. It confirms that trustees that engage in SRI largely do this in line with the traditional meaning of their fiduciary

[556] The responses reported in Figure 37 for non-SRI investing pension funds refer to the actual responses prior to the additional assumptions being made.

[557] As indicated in section 5.3.2.1, in order to increase the overall number of cases (allowing for the inclusion of these variables in the multivariate analysis) we assume that non-SRI investing pension funds are generally more skeptical than those that engage in SRI. We therefore reclassified non-SRI investors that have not responded regarding long-term performance expectations of SRI into "does not agree" and those that have not responded on the cost and risk related questions into "agree". Although for the whole sample the significance levels of the cost and risk variables change substantially upon the inclusion of the different assumptions, in the light of earlier evidence cited in 4.1.1.1 we consider these realistic assumptions, which help to increase the overall quality of the results.

duties. As shown in section 2.4.1, in theory the fiduciary obligations of pension fund require trustees to invest pension assets in a prudent manner, which is traditionally interpreted as maximizing returns on investment, while maintaining sufficient diversity within their portfolio. As such, in line with the typology of SRI investors developed in section 2.4.3, pension funds that engage in SRI this way would typically be classified as either rational economic investors (see section 2.4.3.1) or as socially responsible investors that have a clear focus on shareholder value creation (see section 2.4.3.2.3). This means that in both cases they factor ethical considerations only to the extent that this is expected to generate financial value in return. Hence, trustees' perception of SRI in terms of performance, costs and risk is likely to fundamentally influence their propensity to engage in SRI.[558] Inversely, and in line with Cumming and Johan, one could conclude that a major reason for hesitancy on the part of pension funds entering the SRI arena may include the fear that by investing in SRI optimal returns may be forfeited.[559] As has been shown in section 2.5.3, today there is sufficient evidence that this view no longer holds. It is therefore the role of the SRI asset management industry to overcome this barrier and make the case for a financially convincing SRI strategy.

Although most pension funds that engage in SRI have a positive view about the financial performance of SRI, the above figures suggest that in some cases pension funds engage in SRI despite being rather skeptical or indifferent about possible financial implications. To get a better view about the individual fund's perception with respect to performance, costs and risks, in Figure 38 we display the detailed responses as a decision tree. While the figure shows a rather fragmented picture, which makes it difficult to derive clear cut conclusions, one can at least distinguish between three broad groups in terms of how pension funds perceive SRI financially. There is a larger group of 45 funds which either have an entirely positive (group 1) or largely positive (groups 2 – 7) view about SRI and hence whose perception can be considered as a driver for their SRI engagement. At the other extreme there is a smaller group of 4 rather skeptical pension funds that either have a completely negative (group 14) or mostly negative (groups 12 – 13) view.[560] In between there are 32 funds (groups 8 – 11) that are indifferent or have not responded to these questions (e.g. are assumed to have no opinion). One can conclude that for the skeptics as well as those funds that are indifferent, the financial argument does not serve as an explanation for their SRI behavior.

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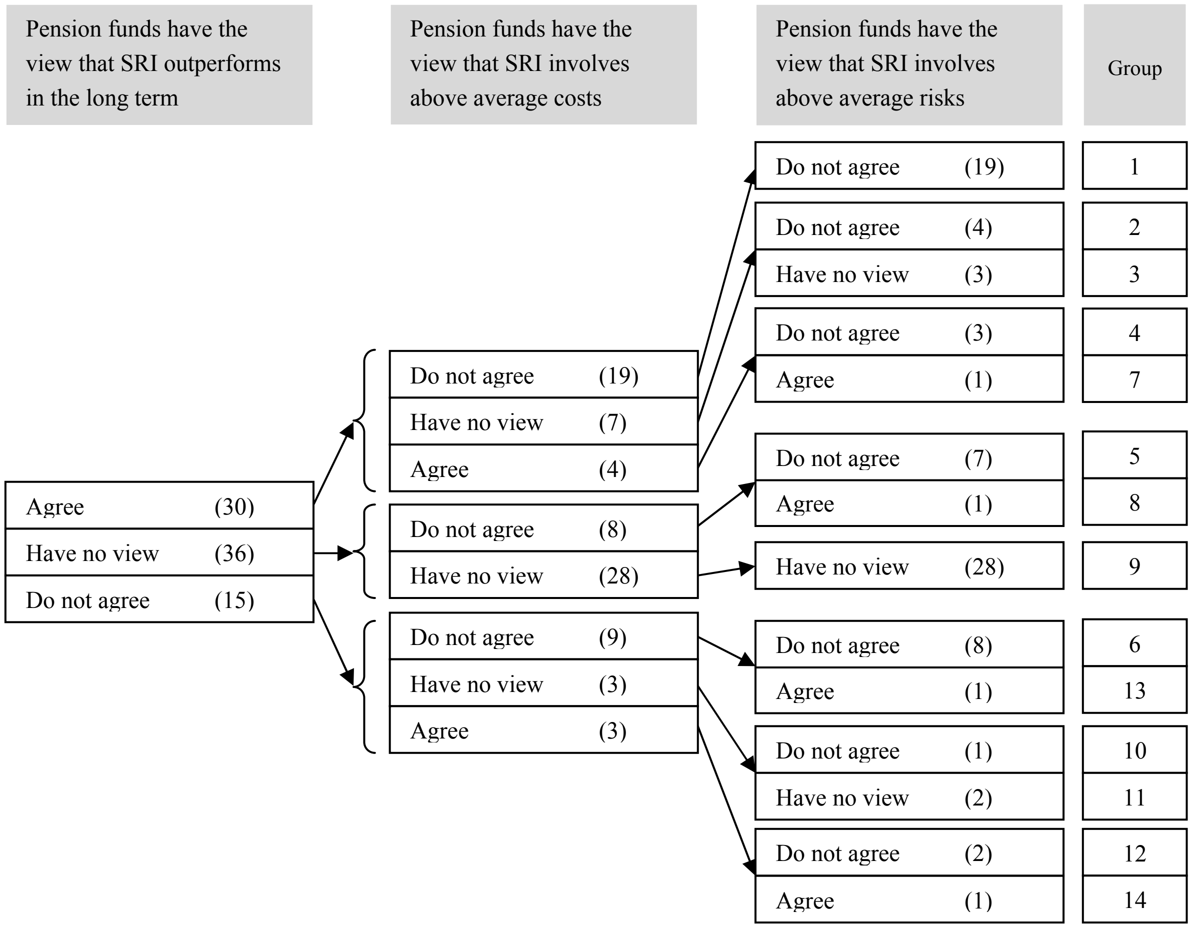
[558] See Schumacher-Hummel (2004, p. 197), Cumming, Johan (2007, p. 412), Williams (2007, p. 48), Nilsson (2008, p. 312). See comment by Ambachtsheer (2006a) regarding a survey conducted among institutional investors in the U.S. which showed that roughly 60% of the interviewees agree that the belief that SRI helps in reducing risks and improving returns is an important driver for SRI among trustees. This explanation is also consistent with empirical findings that many pension fund trustees are still refusing SRI on the ground that the inclusion of SRI criteria necessarily hurts financial performance or increases portfolio risks (for example see Kinder (2004a, p. 15)).

[559] Cumming, Johan (2007, p. 400)

[560] This finding is actually in line with conclusions by Lusenti (2009) who concludes that in some cases Swiss pension funds engage in SRI although they do not believe in the financial quality of SRI.

FIGURE 38 – FINANCIAL PERCEPTION OF PENSION FUNDS REGARDING SRI (2)



Source: Based on data from the Swisscanto pension fund survey 2008

What seems to contradict with the funds' fiduciary duties may actually also serve as an indication that the motivation for SRI differs even among pension funds and that pension funds interpret their fiduciary duties differently. It also indicates that although the financial argument seems to be a dominant driver, pension funds that engage in SRI are not all the same in terms of their underlying objectives. That is, while for the groups 1 – 7 the SRI engagement can be explained by making reference to financial arguments, the ‘indifferent’ groups (8 – 11) and especially the ‘skeptics’ (12 – 13) must be attracted by other reasons, eventually including also ethical rationales like those outlined in section 2.4.2.1.[561] For the SRI asset management industry this implies that although the majority of pension funds are primarily interested in financially successful products, one has to be aware that there are also funds that are driven by non-financial rationales. From this it becomes clear that providers of SRI services to pension funds should make an effort to explore in detail the specific interest of pension funds with regard to SRI and transform them in a functioning investment strategy aimed at meeting the specific investment objectives.

[561] Alternative explanations for the SRI behavior of these funds will be examined in section 6.1.3 when it comes to the role of the beneficiaries.

6.1.1.2. PROFESSIONAL QUALIFICATION OF PENSION FUND TRUSTEES

As stated in section 4.1.1.2, in Switzerland no explicit legal requirement exists regarding the level of education or financial and investment qualifications of pension fund trustees. Nevertheless, among the 175 funds that responded to this question, 125 funds either selected the employer or employee representatives or both according to their specific professional qualification, while the remaining 50 funds do not. On average trustees of pension funds that engage in SRI show a lower level of qualification than trustees of those funds that do not engage in SRI, which would run against our hypothesis. Although this relationship is not significant (see Table 22), one could argue that pension fund trustees with a higher level of professional qualification are more likely to follow a conservative investment approach and stick to standard investment practices than trustees with a less solid financial background and who eventually are driven by other non-financial motives. As a result, for the former, entering the SRI arena may seem to be breaking new ground, which means that they have to invest additional effort (time and expertise) and from a traditional finance perspective may be considered to bear also additional fiduciary risks. This would be in line with Caerlewy-Smith, who found that the higher the trustee's professional qualifications, the more likely he or she was to believe that there were significant barriers to the implementation of a SRI strategy.[562] Clearly pension fund trustees tend to lack appropriate incentives to overcome such barriers and they normally need to have additional motivations (e.g. personal motives, explicit requests raised by the beneficiaries, SRI mandate explicitly included in a fund's statutory framework) to make this move. Providers of SRI products as well as consultancies may contribute here by proving the long-term business case for SRI.

6.1.1.3. FEMALE REPRESENTATION IN PENSION FUND BOARDS

Looking at other demographic characteristics of boards shows that pension trustees are a rather homogenous group of individuals characterized by limited diversity in terms of age or sex. For example, the boards of the pension funds included in our sample are generally characterized by a low level of female representation, comprising on average only 16.1%. When distinguishing between public and private funds, the data shows that public institutions on average have a higher female representation of 17.3% against only 15.1% for private institutions, which suggests greater awareness of achieving adequate female representation among public pension funds. Among the 69 documented cases in our sample, only two funds, both private institutions, achieve gender parity. In contrast, 11 funds report having no women on their board at all. A similar picture holds also for other pension bodies, such as the management of the fund or fund committees confirming that investment oversight at pension funds remains largely a male domain. Interestingly, in Switzerland this underrepresentation of female board members is not subject to a similar public debate as in the corporate sector or the political arena, which suggests that there is only limited interest among women for this role. Accordingly, Amacker argues that pension funds have difficulty finding interested and qualified female candidates, because this field is traditionally seen as rather complex and technical,

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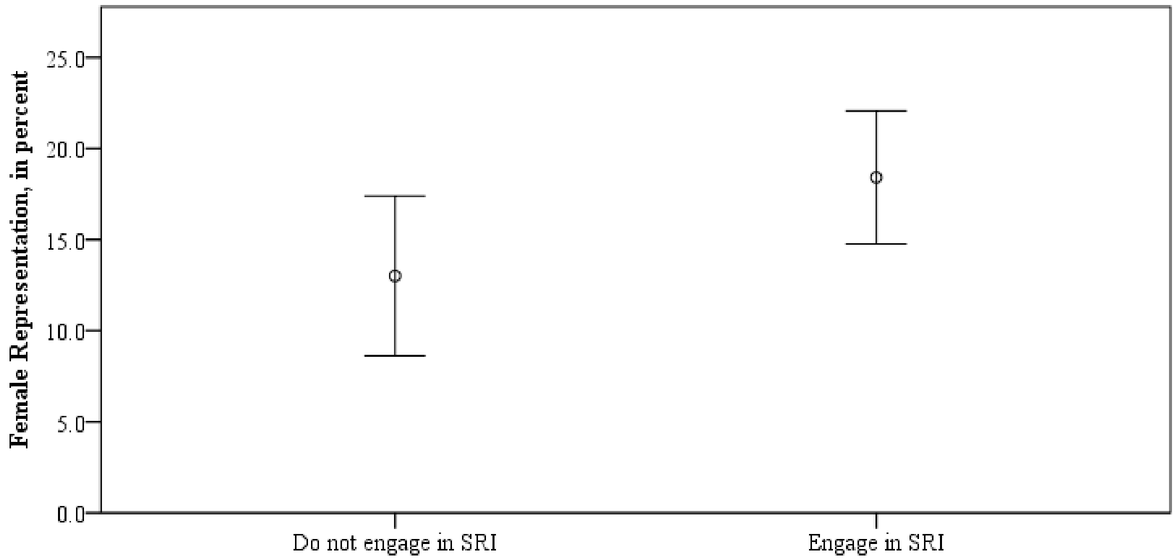
562 See Caerlewy-Smith (2006, p. 1586)

requiring specialist knowledge and involving personal liability, which according to Amacker are deterrents for many women. However, to the extent that, female employees fund a large proportion of the pension assets, pension funds may need to rethink their entry criteria and implement appropriate incentives to increase diversity in the supervision of pension assets.[563]

Looking at the potential relationship between female representation and SRI behavior of pension funds, the data provides evidence that with a mean value of 18.4% pension funds that engage in SRI have higher female representation than funds that do not, where the value is only 13.0% (see Figure 39). The bivariate results included in Table 22 show that this relationship is significant for the overall sample as well as for the public subsample but not for the private institutions (although going in the same direction), which suggest that this relationship applies to public funds. In line with the literature introduced in section 4.1.1.2, which suggests that women are generally more interested in wider CR issues and more likely to take account of such factors in their investment decisions, we conclude that this finding is consistent with our hypothesis that pension funds that include a higher percentage of women in their governing body are more likely to engage in SRI as well. However, in order to gain further insights on the role of women regarding the general investment practices of pension funds and whether their percentage representation can be considered as determinant of the SRI behavior of pension funds, one would need to also include this variable in a multivariate stage, which would require a more comprehensive set of data.

FIGURE 39 – FEMALE REPRESENTATION IN PENSION FUND BOARDS



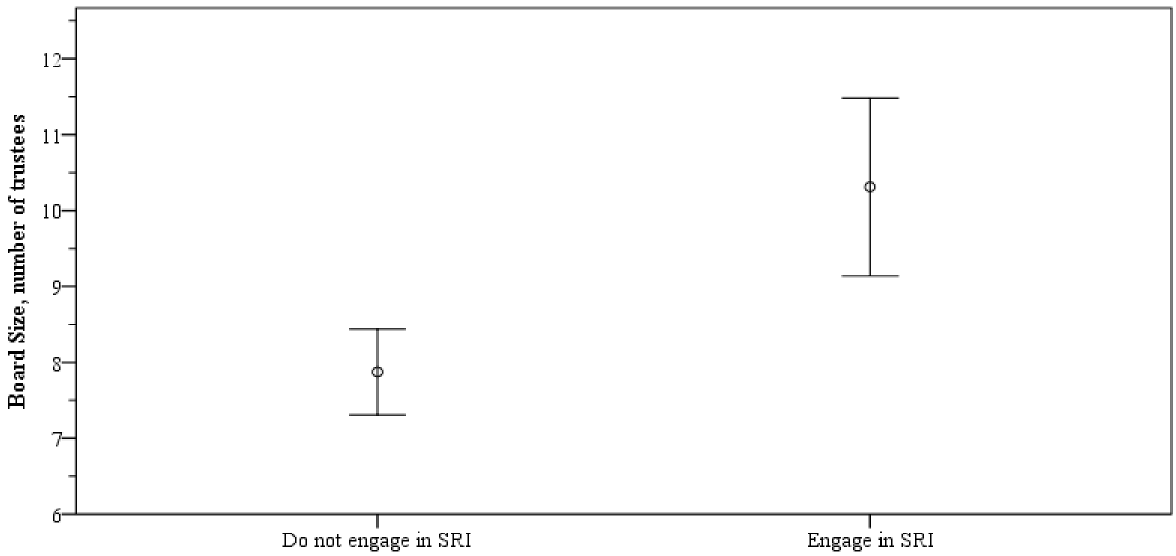
Source: Based on own data obtained from annual pension fund reports

563 Based on anecdotal evidence this holds also for younger employees where due to limited data available we have not examined this variable empirically. Furthermore, according to Swisscanto (2008, p. 55) boards also include retired employees in only 26% of cases.

6.1.1.4. BOARD SIZE

Based on SPFS 2007 Weber et al. calculate that on average pension fund boards of private funds are composed of 8 to 10 trustees. Around 16% of private institutions have only 4 or less trustees in their governing body, whereas 10% have more then 10. In contrast more than half of the boards of public institutions have more than 10 trustees.[564] On average the pension fund boards included in our sample are composed of 8.8 trustees. Whereas the smallest board consists of only 3 trustees, the largest board has 39 members (both cases are public institutions).[565] As is shown in Figure 40, in our sample SRI is observed more often among funds with larger decision-making bodies, which runs against our hypothesis that SRI is more common among pension funds with smaller boards that are assumed to require less transparent decision-making. Whereas the average size of a pension fund board of SRI investors consists of 10.3 trustees, the average board of non-SRI investors is composed of only 7.9 trustees. The bivariate analysis in Table 22 shows that this relationship is significant for the overall sample as well as for the public funds, but not for the private institutions, which indicates that the hypothesized relationship between board size and SRI behavior holds for public funds. In contrast, the multivariate analysis then shows that the size of a pension fund board does not play a role in any of the proposed models 1 – 7 (see Table 25). An explanation for the limited explanatory power of this characteristic for the SRI behavior of pension funds can be found by referring to the legal form of pension funds. Boards of public funds are generally larger (on average 11.5 trustees) than boards of private funds (on average only 8 trustees). As shown in section 6.1.2.3, the legal form can be considered a key factor for both the bivariate and multivariate analysis, confirming our hypothesis that public funds are more likely to engage in SRI.

FIGURE 40 – SIZE OF PENSION FUND BOARDS



Source: Based on data from the Swisscanto pension fund survey 2008 and annual fund reports

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[564] Weber et al (2009, p. 59)

[565] The uneven numbers, which appear to contradict the legal requirement of equal representation of employee as well as employer representatives, can be explained by the fact at the time of the reporting some funds have not yet replaced trustees that have retired or resigned from their function.

6.1.2. Disposition of Employers

Surprisingly, only 5 funds out of the 81 pension funds with positive SRI behavior report that their SRI strategy is a direct consequence of the employer's disposition towards environmental, social or ethical concerns. 40 funds report no such disposition, while the remaining 36 funds have not responded to this question. Although these figures indicate that for a limited number of funds there is a convergence between the disposition of the employer and the SRI behavior of the respective pension fund, for a majority of Swiss pension funds they rather indicate the opposite, namely a disparity between the two which adds to the legal separation between the pension fund and its sponsoring institution. In order to examine this question in more detail we have established additional measures including the mission background of the employer, the existence of a CR agenda in the case of private employers as well as the legal form of the pension funds.

6.1.2.1. Mission Background

Looking in a first step at the employers which can be attributed with a specific mission background (e.g. employers that have a religious, union, educational, health/social, cultural background) the non-significant bivariate results disclosed in Table 22 support the initial finding that there is no relationship between an employer's disposition towards environmental, social or ethical concerns and the SRI behavior of its pension fund (see also section 6.3.3), which runs against earlier findings by Oesch.[566] Although the bivariate results are impacted by the low number of cases (14), they show that in some cases where one would naturally expect a strong propensity to engage in SRI no such strategies yet exist (see Table 26).[567] However, rather than having explicitly erected a wall between the investing practices of their pension fund and their organizational commitment for good works (which often exists among foundations and universities[568]), we assume that this separation is rather the result of trustees' unawareness or lack of knowledge about the subject and the potential need for organizational consistency.[569] For example, without having access to detailed data on the composition of the portfolio of these funds, we assume that several mission-oriented employers in Switzerland are very likely to be invested through their pension funds in companies that directly violate their organizational commitment (e.g. health-oriented funds investing in tobacco companies or church funds investing in companies involved in the production of anti-personnel mines, cluster munitions and/or depleted uranium intended for military purposes). Hence SRI asset managers or consultancies should make a special effort to create awareness among these pen-

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[566] Oesch (2000). This variable has been included only at a bivariate stage but due to its non-significance not been considered in the multivariate analysis.

[567] Regarding church pension funds this somewhat disillusioning result has been confirmed by an earlier study by Hoppe et al. (2007). According to the authors there is a certain lack of credibility among these types of mission oriented organizations in cases where they do not consistently invest their pension fund assets in line with their own organizational values.

[568] See Rosenthal (2008)

[569] The same also holds for those funds that engage in SRI as only one fund (*) reports that its SRI engagement is a direct consequence of the employer's commitment towards the subject.

sion funds of mission-related investing and explore opportunities whereby employers can adapt the investment strategies of their pension funds in a way to ensure organizational consistency and avoid reputational risks.

TABLE 26 – MISSION BACKGROUND OF PENSION FUNDS

Mission background	Do not engage in SRI	in %	Engage in SRI	in %	Total
Church	1	50	1	50	2
Culture	-	-	1	100	1
Education	2	50	2 (1)*	50	4
Health	4	60	3	40	7
Total	**7**	**50**	**7**	**50**	**14**

Source: Based on data from the Swisscanto pension fund survey 2008; (*) in a single case SRI is reported to be the direct consequence of the employer's commitment towards the subject.

6.1.2.2. CR Agenda and Sin Stocks

Looking in more detail at the subsample of the private pension funds with closed membership, it can be seen that in cases where employers have an established CR strategy or indicate that they address environmental opportunities and / or risks (suggesting that they are aware of the subject), the respective pension funds are more likely to engage in SRI. This finding turns out to be significant in the bivariate analysis (see Table 22), as well as for multivariate analysis (see Table 25, model 6). Thus despite the fact that in Switzerland, strictly speaking, pension funds are separate legal entities from the employer, in the case of private funds employers seem to influence the investment strategies of their pension funds to a certain degree. However it is not clear if it is the employer who actively influences the investment strategy of the pension funds or if the board members themselves (including employee representatives) consider organizational consistency as a relevant factor. In any case, companies that have a strong CR commitment, but whose pension fund does not yet adhere to similar principles should be aware that in the future they might be confronted with greater pressure to address this inconsistency. For example, such inconsistencies could emerge in the case of financial institutions which do not provide finance to companies involved in certain unethical practices (e.g. use of child or forced labor) or companies that due to their CR strategy do not source from suppliers with a bad track record, but where the corresponding pension fund is in fact invested in such controversial firms. In the U.K. context, Robert Barrington from ISIS argues that this particular case may well be an "emerging area for pressure groups and an emerging risk for company reputation, especially if the pension fund has the same brand as the company".[570]

Inversely, we have not found a significant relationship between the employer's classification of sin stocks and the propensity of its pension fund not to engage in SRI.[571] Among the 16 funds that can be classified as sin stocks or as companies that have been subject to major con-

[570] McCallin (2003)

[571] Due to its insignificance at the bivariate stage this variable was not included in the multivariate analysis.

troversies in the past, 11 pension funds do not engage in SRI, whereas 5 funds nevertheless engage in this sort of investment practice. This finding is again hampered by the low number of cases that can be classified as sin stocks (16). In addition, the finding seems further influenced by the fact that although some of the companies can be considered sin stocks, they seem well aware of their corporate responsibilities as established by their CR strategies (see figures in brackets in Table 27). Interestingly, this holds for all funds of sin stocks that engage in SRI (100%), but to a much lesser extent for those funds that do not engage in SRI (45.5%). Regarding the former, this concerns mostly larger firms that although being active in controversial sectors address environmental and social risks and opportunities. In contrast, among the latter, companies that are active in the arms and tobacco business are at least consistent, to the extent that they show no socially responsible behavior in the case of their pension fund.

TABLE 27 – SRI BEHAVIOR OF SIN STOCKS

Sin Stocks	Do not engage in SRI	in %	Engage in SRI	in %	Total
Arms	3 (0)	100	-	-	3
Chemistry & pharma	1 (1)	50	1 (1)	50	2
Controversies	2 (1)	40	3 (3)	60	5
Fossil fuels	1 (1)	100	-	-	1
GMO	-	-	1 (1)	100	1
Nuclear	2 (2)	100	-	-	2
Tobacco	2 (0)	100	-	-	2
Total	**11 (5)**	**68.75 (45.45)**	**5 (5)**	**31.25 (100)**	**16**

Source: Based on data from the Swisscanto pension fund survey 2008; figures in brackets refer to entities that have an established CR strategy.

6.1.2.3. LEGAL FORM

Finally, as stated in section 4.1.2, public pension funds have traditionally been among the most active SRI investors in many countries. This is also the case in Switzerland, where a large majority (73.9%) of all public institutions included in the sample (46 funds) engages in SRI. In contrast, only a minority (23.2%) of all private pension funds (203 funds) apply SRI investment principles. This confirms earlier findings by Lusenti, who showed public pension funds made up the largest share of SRI-applying pension funds.[572] As shown in Table 22 and Table 25 (models 1-3, 5 and 6), the legal form of a pension fund is a significant factor confirming our hypothesis that public pension funds are more likely to engage in SRI than private pension funds.

There are different explanations why public pension funds are more inclined to engage in SRI than their private counterparts. Lusenti argues that the boards of public pension funds often also include union officials, as well as political representatives who bring certain dynamics to

[572] See Lusenti (2009)

decisions on asset allocation.[573] The boards of public pension funds are therefore often more political in nature than the boards of private pension funds. Indirectly this is confirmed by Queisser and Vittas, who state that in Switzerland the pension funds of public sector entities are often multi-employer funds, which combine different public entities from the same region. By nature they therefore tend to also include public employers with a social, cultural, educational, ethical/religious or health background and therefore, as argued in section 6.1.2.1, are more inclined to engage in SRI.[574] An alternative, but closely related explanation has been provided by Gérard Fischer, CEO of the Swisscanto Group, who considers public pension funds simply as being more exposed to the public and therefore as being under greater pressure to address SRI related issues.[575]

Dominique Biedermann, director of Ethos, argues that the higher propensity of public funds engaging in SRI holds especially in the context of responsible shareholder engagement practices.[576] This is confirmed by the Swisscanto data which shows that with 58.8%, public funds are more likely to practice shareholder engagement than private funds where only 29.8% report similar SRI practices (Table 28). The higher propensity of public pension funds to conduct shareholder engagement is typically explained by the fact that due to the small size of the Swiss market and the strong interrelation between firms, private funds tend to refrain from making active use of their voting rights in order to interfere in the governance of other companies. In contrast, this conflict of interest does not exist in the case of public institutions.

TABLE 28 – SHAREHOLDER ENGAGEMENT PRACTICES BY SWISS PENSION FUNDS

	Public funds	in %	Private funds	in %	Total
Total	46	18.47	203	81.53	249
Non-SRI investors	13	7.69	156	92.31	169
SRI investors	34	41.98	47	58.02	81
Conduct shareholder engagement / no shareholder engagement practices	20 / 14	58.82 / 41.18	14 / 33	29.79 / 70.21	34

Source: Based on data from the Swisscanto pension fund survey, 2008

To conclude, one could argue that although only five funds have explicitly reported that their decision to engage in SRI is a consequence of the employer's disposition, for some categories of pension funds stronger links nevertheless seem to exist between the employer and the propensity of pension funds to engage in SRI. In particular, this link is significant in the case of public employers, but also for corporate institutions, which have already engaged in CR practices. In contrast, surprisingly, in mission-oriented institutions, which one would expect to pursue a SRI strategy through their pension arm, this link seems rarely to be established.

[573] This would further confirm hypothesis H4.1, but also H2.5 which due to the lack of data has not been tested empirically.
[574] Queisser, Vittas (2000, p. 33)
[575] Ottawa (2008)
[576] Ottawa (2008), see also Oesch (2000, p. 31)

6.1.3. Role of Beneficiaries

As already shown in section 4.1.3, contrary to other countries such as the U.K. or the U.S., within the Swiss mandatory system beneficiaries have no choice on how their retirement assets are invested.[577] Nevertheless, analysis of the Swisscanto data shows that beneficiaries play a significant role in whether their pension funds engage in SRI. As introduced in section 5.3.2.1, in order to measure the role of the beneficiaries, we have established two separate variables. The first variable measures if the SRI behavior of a fund is the result of an explicit request by its beneficiaries, whereas a second variable refers to the perception of trustees as to whether SRI is in the best interest of their beneficiaries.

For the first variable, among the 81 pension funds that show a positive SRI behavior in our sample, 18 funds report that they have introduced their SRI strategy in response to an explicit request made by their beneficiaries. This relationship turns out to be significant in the bivariate analysis (see Table 22[578]), confirming our hypothesis that pension funds that have been confronted with an explicit request by their beneficiaries to engage in SRI are indeed more likely to invest in SRI. Although this relationship seems evident, it is nevertheless surprising to the extent that apart from access to employee representatives, beneficiaries have no institutionalized mechanism to voice their concerns or interact with their trustees on how pension assets as a whole or how a particular holding should be managed. As a consequence it could have been expected that beneficiaries are rarely concerned about their fund's investment policies and barely vocal on how their funds should actually be managed. This has been confirmed by a survey by Furrer and Seidler among Swiss pension fund beneficiaries, which showed that they seldom direct requests for SRI towards their pension funds.[579]

This limited role of pension fund beneficiaries is further aggravated by the fact that they generally only have limited information on the funds' investment strategy on individual portfolio holdings of their pension fund (see section 6.2.3.3), which raises questions about the general transparency of Swiss pension funds (see 6.3.2). As a result, beneficiaries are not aware when their pension assets are invested in controversial companies or projects. Certainly, increased portfolio transparency would raise the attention of beneficiaries as well as other stakeholders and might lead pension fund trustees to rethink certain investment decisions. To the extent that Swisscanto data shows that some pension funds are responsive to specific requests, beneficiaries should definitely seize opportunities (e.g. via email, phone calls, events and meetings, participating in pension fund surveys) to raise their concern with their trustees regarding SRI. A particular issue to start with concerns the transparency of pension funds towards their participants in terms of portfolio constituents.

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[577] Queisser, Whitehouse (2003, p. 7)

[578] For the multivariate analysis we have included only the measure regarding the beneficiaries' best interest but not if the beneficiaries have explicitly requested SRI. This variable drops out from the multivariate analysis since the underlying question in the survey instrument has been phrased in a way that we have no positive responses for the non-SRI investors.

[579] Furrer, Seidler (2006)

In this context it has to be also stressed that it is not only the responsibility of the beneficiaries to raise their voices, but also the responsibility of the trustees to better understand what the best interest of their beneficiaries is. As shown in section 4.1.3, beneficiaries' best interest is normally interpreted as being in the best financial interest, which is defined as maximizing returns for a specified level of risk. However, it has also been shown in the same section there is abundant evidence that a substantial number of beneficiaries have a different view of their best interests and some would even accept their pension fund engaging in a SRI strategy that leads to somewhat lower returns. Whichever interpretation pension funds apply, it should have become clear from section 2.5.3 that both interpretations allow for the introduction of a SRI strategy. The Swisscanto data shows that 37 of the 81 funds that engage in SRI actually consider this to be in the best interest of their beneficiaries. 12 funds do not share this view, while 32 funds have no view. Again this result is significant for the bivariate as well as for the multivariate analysis (see Table 22 and Table 25, model 4), confirming our hypothesis that pension funds whose representatives see SRI as being in the best interest of their beneficiaries will be more likely to invest in SRI.

Interestingly, the 37 funds that consider SRI to be in the best interest have varying views regarding the financial performance of SRI. As shown previously in Figure 38, the funds that show positive SRI behavior can be categorized into three different groups with regard to their financial perception of SRI. The first group considers SRI to be financially sound; a second group is 'indifferent', whereas a third group has been labeled as 'skeptic'. As shown in section 6.1.1.1 the 'indifferent' and the 'skeptics' must be attracted by other reasons than purely financial ones. In eight cases, we find that the beneficiaries actually play a role in the decision of a fund to engage in SRI (see Table 29).[580] In fact, two pension funds classified as 'indifferent' report that their SRI engagement is a direct consequence of requests by their beneficiaries. In another six cases (four 'indifferent' and two 'skeptics'), trustees consider SRI to be in the best interest of their beneficiaries although they do not see any added financial value. As already stated, these figures confirm that some funds interpret the meaning of their fiduciary duties differently by applying a broader interpretation of their beneficiaries' best interests, which goes beyond pure wealth maximization objectives. The 'skeptics' trustees even seem to accept a financial trade-off in order to meet the ethical expectations of their beneficiaries. Thus, although in Switzerland, article 71 of the BVG instructs pension trustees to manage assets prudently to ensure the security of assets, achieve a reasonable return on investments, maintain a suitable diversification of risks and allow for the liquidity requirements of the plan[581], in reality it seems that some funds engage in SRI although they consider this to be inappropriate from a prudent perspective. From this we can conclude that some funds would also qualify as balanced or ethically minded investors according to the typology developed in section 2.4.3.2.2, showing that the fiduciary framework leaves trustees enough room for maneuver to follow a wide range of strategies.

[580] The background or mission of the employer does not play a role in either of these cases.

[581] See article 71, BVG and articles 49-60, BVV2. See Frauenlob (1998, pp. 64-65)

TABLE 29 – ETHICAL RATIONALES FOR SRI BEHAVIOR

	Cases*	Total number of funds	Q33.52: SRI has been requested by the beneficiaries	Q33.53: SRI is expected to be in the best interest of the beneficiaries
'Indifferents'	8	1	1	0
	9	28**	1	1
	10	1	0	1
	11	2	0	2
'Skeptics'	12	2	0	1
	13	1	0	0
	14	1	0	1
	Total	**36**	**2**	**6**

Source: Based on data from the Swisscanto pension fund survey 2008; * cases refer to the classification defined in Figure 38. ** includes pension funds that have not responded to the questions which address the role of the beneficiaries.

Whereas pension funds that engage in SRI primarily for financial purposes do not need to liaise with their beneficiaries on the boundaries of their SRI strategy (as this is based on a conventional investment rationale and in line with wealth maximization objectives), it could be argued that trustees that are indifferent or even skeptical about the financial performance of SRI, but nevertheless want to engage in SRI, should seek the views of their plan beneficiaries when they engage in SRI. This means that they must open lines of communication with their beneficiaries in order to better understand how they stand on ethical issues that might affect the investment policy.[582] Clearly it is very challenging to survey the preferences of thousands of beneficiaries and their values and beliefs may vary widely, since each individual has a different approach to what is ethical or should be considered in a SRI strategy. For example, the exclusion of companies by a pension fund trustee based on some distinct beneficiaries' values, may confer utility on some beneficiaries while at the same time impose restrictions on others.[583] Correspondingly, it will become difficult for trustees to set up a purely norm based SRI strategy that reflects the plurality of values of the beneficiaries – also because according to Langbein and Posner, pension funds do not dispose of required mechanisms by which they could make the calculations necessary to decide which principles they should adopt in order to maximize the overall utility of the fund beneficiaries.[584]

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[582] Barber (2006, p. 20)

[583] See Langbein, Posner (1980, p. 95)

[584] Langbein, Posner (1980, p. 95). See also Grene (2008). Instead of asking for input individually and to avoid the difficulty of conflicting values, participants in the 2004 competition by USS entitled "Investing Pension Funds as if the Long-term Really Did Matter" (see Hewitt Bacon, Woodrow Limited (2004, p. 14)) suggested that trustees should segment the beneficiaries into different groups or clusters in order to analyze preferences for each group. Then the liabilities for each group would be calculated and the investment policy for the corresponding pool of assets managed in line with each group's characteristics and preferences. To the extent that this does not work under the mandatory Swiss pension fund system, alternatively the pension funds could set up a committee to identify the major issues of concern for their scheme members.

6.1.4. Reliance on Investment Consultants

In Switzerland, PPCmetrics (30%), Complementa (30%), Ecofin (10%) and Coninco (10%) are the leading investment consultants for pension funds in terms of market share.[585] According to Dominique Ammann, partner at PPCmetrics, about half of all pension funds make use of such consultancy services.[586] An earlier report by ASIP/Swissca even states that 63% of all funds use independent consultancies, mainly for developing their investment strategies.[587] After reviewing websites and annual reports of these consultancies, it is fair to conclude that none of them shows evidence of specific SRI expertise.[588] Other institutions that are active in the Swiss market include foreign consultancy firms such as Mercer and Watson Wyatt, which have established SRI competencies in a global context. It is however unclear if these services are also offered to their Swiss clients.[589] Finally, specialist providers of SRI related consultancy services and which play a niche role in the market include onValues or Conser Invest. We have found no evidence that any of the pension funds included in our sample has made use of these specialist providers in the past.

Within the bivariate analysis we find a negative statistical association between the presence of investment consultants and the disposition of pension funds towards SRI, which would confirm our hypothesis. However, except for the public subsample, this relationship is not statistically significant (see Table 22), which could partly be explained by limited data quality.[590] Despite this, in the light of the central role that many investment consultants have in terms of developing a fund's investment strategy, it is still fair to conclude that additional competence and activism on the part of the consultants would help increase demand from pension funds. However as shown, it seems that mainstream investment consultants have not yet been attracted to this market and refuse to invest additional resources to increase their capacity. Partly this reluctance could be explained by the low demand reported by different studies (including the annual Swisscanto surveys) and which, as shown in section 3.2.1.1 considerably underestimated the market potential. Accordingly, to the extent that so far none of the big players discloses any specific SRI capabilities, additional competence, including the provision of access to information and advice on SRI investments could serve as a differentiating factor, which may help open up additional business opportunities and generate new revenue streams.

6.2. Portfolio / Investment Characteristics

6.2.1. Portfolio Size

As shown in section 5.1, with an average pension fund size of CHF 1.57 billion compared to the average size of the total pension fund population of only CHF 240 million our sample is

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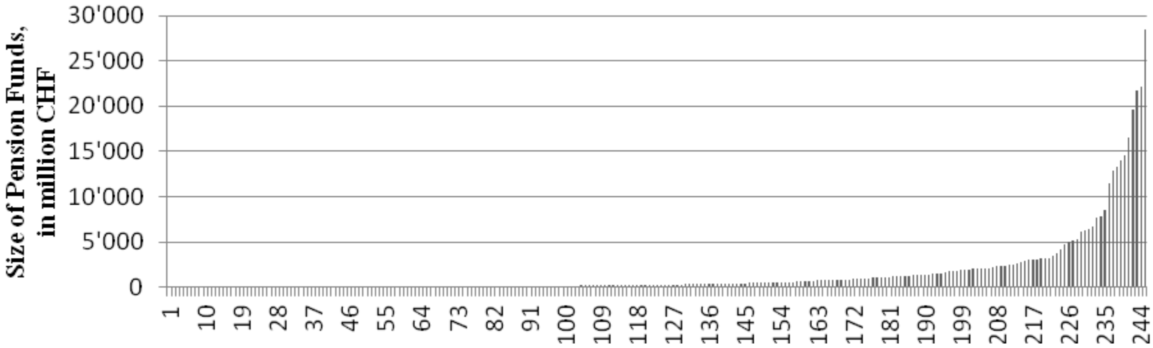
[585] See Ferber (2010)
[586] See Ferber (2010)
[587] See in Schumacher-Hummel (2004, p. 241)
[588] According to Schumacher-Hummel (2004, p. 266) Ecofin has included SRI criteria in the past in the selection of external asset managers.
[589] Eurosif (2009, p. 19)
[590] Due to the low number of cases (63) this variable has not been included in the multivariate analysis.

clearly biased towards larger institutions. Nevertheless, as shown in Figure 41 the sample still consists of mostly smaller institutions. Whereas the smallest fund, a private institution, accounts only for CHF 0.5 million, the largest fund, a public institution, manages CHF 28.4 billion. This considerable disparity in terms of IA shows that pension funds are often wrongly considered by definition as large investors that have enough market power to influence corporate decision makers (see also section 6.2.3.3).

FIGURE 41 – DISTRIBUTION OF SIZE OF PENSION FUNDS INCLUDED IN THE SAMPLE



Source: Based on data from the Swisscanto pension fund survey 2008

As shown in section 4.2.1 considerable evidence exists from other studies that larger pension funds are more likely to engage in SRI than smaller funds. This is also the case for our sample. The bivariate results disclosed in Table 22 show that the results are significant not only for the entirety but also, after controlling for the legal form, for the public and private subsamples. This would initially appear to confirm our underlying argument that investors with a larger asset base can benefit from economies of scale in analyzing or engaging with companies. In return, this leads to lower marginal costs in acquiring and analyzing information or directly engaging with management, shifting the cost return calculus for SRI. However a closer look at the data raises questions about this line of argument. In fact the results of the multivariate analysis included in Table 25 conclude that except for model 5 (where we have omitted all variables regarding the financial performance of SRI, as well as the question about the beneficiaries' best interest) the size of a pension fund does not play a role.

An initial explanation for the limited explanatory power of the size variable can be provided by referring to the cost aspect of SRI, which has been closely linked with the size argument in section 4.2.1. In reality, however, the cost argument seems not to play a role in relation to pension fund size. As shown in Figure 37, the rather negative view about additional costs from SRI holds only for the non-SRI investing pension funds[591], but not for the SRI investors. Actually for the latter, only 7 funds consider SRI to be too costly, whereas 36 do not. Moreover, out of the 7 funds, 4 funds share the view that SRI will outperform in the long run (see Figure 38), which means that the additional costs from conducting enhanced research will be

[591] The figure for the non-SRI investors is flawed to the extent that the large majority of non-SRI investors have not responded to this question.

compensated in the long-term by financial outperformance. This largely corresponds with the view of second generation or 'rational' SRI investors who start from the assumption that the higher the costs committed to make an informed investment decision (e.g. through an ESG analysis), the greater should be the value added from this information – where value added is measured as the likelihood to increase portfolio returns or reduce risk.[592] Thus, as a general rule, a rational investor will engage in SRI only if it has a positive impact on earnings – meaning that the value added of doing so exceeds its costs. For them, factoring such information must pay off over the long-term, either through potential equity premia or risk reduction. Hence, from a rational investor's point of view, the costs associated with using such information should always be linked to the specialist managers' genuine contribution to value added. This rule should be independent of whether a pension fund has its own in-house SRI capabilities or relies on external SRI asset managers. This said, it becomes clear that the propensity of a pension fund to invest in an SRI is not necessarily a function of its size (and hence its ability to bear costs), but rather a function of the trustees' view about the asset managers' capabilities to add value and legitimate higher fees. Although, smaller funds may indeed lack sufficient capacity to manage SRI assets internally (see section 6.3.1), it is important to note that they are equally capable of engaging in SRI by recourse to external asset managers.

6.2.2. Risk-Taking Capacity

Within our sample pension funds have an average coverage ratio of 112.6%. 23 funds are underfunded, with one fund achieving just about 57.9%. 220 funds are fully funded with one fund achieving a maximum of 176.4%. As shown in Figure 42, pension funds that engage in SRI have on average a lower coverage ratio than funds that do not engage in SRI. The bivariate results show that an inverse significant relationship exists for the entire sample, confirming that SRI is observed more often among those funds that are underfunded (see Table 22). However, the results turn out to be statistically insignificant after taking account of the legal form, which is in line with the finding by Swisscanto that public funds generally have lower funding levels than their private counterparts.[593] Thus, overall one can conclude that the funding level itself does not serve as a determinant of the SRI behavior of Swiss pension funds.

Combining the funding level with the financial perception of pension fund trustees regarding SRI as proposed in H8.1, the results in Table 22/8.1 show that among those pension funds that can be considered 'skeptics' (see section 6.1.1.1), SRI is more likely among underfunded pension funds, which would be against the proposed relationship. Again, for the bivariate analysis, this finding is significant for the entire subsample but turns out to be insignificant after taking account of the legal form.[594] Also, this factor is not significant at a multivariate stage as

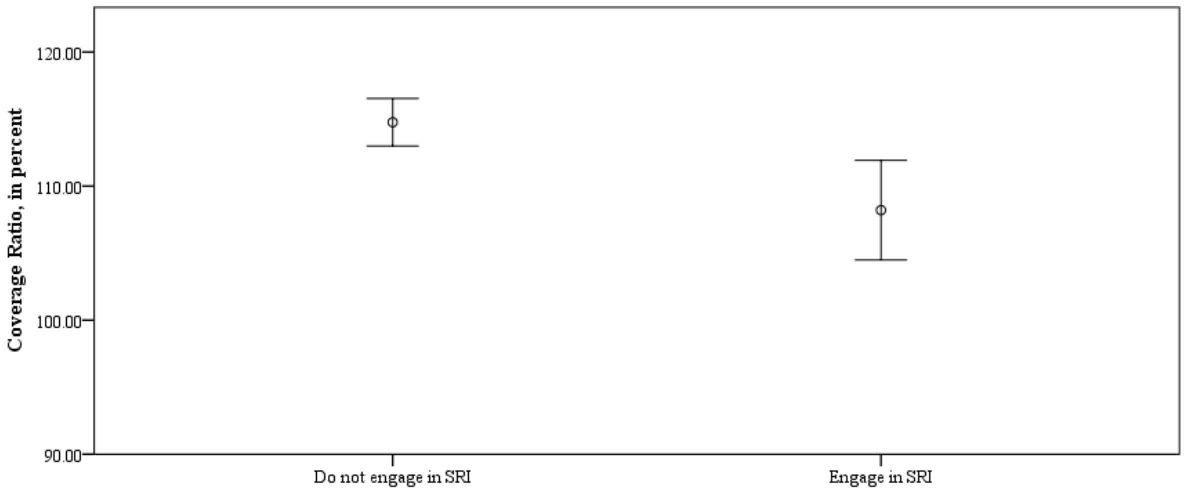
[592] This cost-benefit calculus can vary substantially depending on whether a rational investor uses the information for trading/screening or for direct engagement with a firm (see section 2.5.3 for a detailed analysis of the financial effectiveness of different SRI approaches).

[593] See Swisscanto (2009, p. 50)

[594] For the bivariate analysis this finding is significant for the entire subsample, but insignificant for the private and public subsample, which seems to be a consequence of the low number of cases after controlling for the legal form.

shown in Table 25, model 7, which looks only at the role of the ‘skeptics’. Despite the statistical insignificance of this relationship, the reported cases included in Table 21 and Table 22 deserve a closer look, as they suggest that although being skeptical with regard to the financial performance of SRI, as well as underfunded, some funds still engage in SRI. Partly this contradiction can be explained by referring again to the role of the beneficiaries (see section 6.1.3). In fact, the data shows that the two ‘underfunded skeptics’ that nevertheless engage in SRI report that they do this in the best interest of their beneficiaries. This shows that for some funds, even if they are under pressure to meet their annual funding level, they are ready to sacrifice part of their annual return in an attempt to meet some vague normative expectations of their beneficiaries.

FIGURE 42 – COVERAGE RATIO OF SWISS PENSION FUNDS



Source: Based on data from the Swisscanto pension fund survey 2008

In contrast, despite the very low number of cases, the result in Table 22/8.2 shows that among underfunded pension funds SRI is more frequent when they have a positive perception of SRI, in line with our proposed relationship. For the bivariate analysis this finding is significant for the entire subsample but turns out to be statistically insignificant after taking account of the legal form (see Table 22).[595] Nevertheless, it could be argued that for those funds that are underfunded but still engage in SRI, economic pressures can be a driver in those cases where SRI is expected to provide better long-term returns.

6.2.3. Portfolio Indexation

In our sample, 174 funds (69.9% of all funds) do not pursue an indexing strategy. The other third has an average rate of indexation of 21.8%, ranging from 0.1% to a maximum of 87.5%. In terms of the influence of the level of indexation on the SRI behavior of pension funds we find somewhat mixed results. As shown in Table 22, initially there is a positive significant relationship between the level of indexation and the SRI behavior of pension funds, which holds for the overall sample as well as for the public subsample. In contrast, for the private

[595] Due to the low number of cases this hypothesis has not been tested in multivariate setting.

subsample we find a negative but insignificant relationship. Finally in the multivariate analysis stage included in Table 25, the level of indexation turns out not to be a relevant factor in any of the models we have proposed.

Due to the limitation of the data and hence the limited availability of alternative measures, we used the level of portfolio indexation as a combined measure for three different pension fund characteristics including the long-term investment horizon of pension funds, their level of portfolio diversification, as well as the size of their individual company holdings which is expected to determine the influence a pension fund has on the management of a firm. Based on the above findings, our hypotheses 9 – 11 are not confirmed. This means that pension funds that can be characterized as having a longer investment horizon (due to the larger percentage of their portfolio that is indexed) are not necessarily more likely to engage in SRI than pension funds with a shorter time horizon. Also, pension funds with a larger degree of portfolio diversification are not more likely to engage in SRI to address negative or positive externalities that impact the overall performance of their portfolio. Finally, pension funds with larger holdings in individual companies and which can be considered as having more investment power to promote CR issues either through screening or directly engaging with the management of a target firm, are neither more likely to engage in SRI than funds with smaller average holdings. Clearly these findings require a sound note of caution, as the results may differ considerably in a case where better measures would have been available.[596] However, as will be shown in the following subsections, there is also reasonable doubt whether Swiss pension funds as a group actually meet these characteristics typically associated with pension funds. That is, if they can be classified as long-term investors or universal owners or if they own large enough corporate holdings to influence corporate managers through their ownership or investment decisions.

6.2.3.1. Investment Horizon

As mentioned in section 5.3.2.2, the long-term thinking of pension funds can be measured in different ways, such as the average duration of pension fund liabilities[597], the frequency of performance evaluation within which investment returns are considered, the rate of asset turnover (the average holding period of corporate stock or investment product), or by the discount rate at which pension funds price assets over the long-term. Unfortunately, this sort of data has not been included in the Swisscanto pension fund survey. Despite the limited value of the data, looking at the Swiss pension fund system in general it could be suggested that the capacity of Swiss pension funds to truly act as long-term investors is substantially restricted. The main reason for this is that in Switzerland pension funds not only have to finance long-term liabilities, but they must also achieve a minimum annual return on the mandatory savings capital of active contributors and ensure that the liabilities of the fund are covered at all

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[596] Alternative measures for future research are proposed in section 5.3.2.2.

[597] See Ryan, Schneider (2002), Cox et al. (2004, p. 30), Hesse (2008)

times.[598] To the extent that pension fund trustees or fund managers are evaluated against these targets they face pressure to report a certain level of earnings, which creates incentives to benefit from short-term opportunities rather than looking at long-term value creation.[599] This is consistent with the findings of O'Barr et al. who studied the behavior of U.S. pension funds, concluding that quarterly performance evaluation of trustees leads to short-term thinking among pension funds.[600] As a result, it is not surprising that pension funds have much shorter holding periods than their long-term investment horizon would suggest. For example, Hesse showed that while the pension funds included in his survey on average have an investment horizon of 23 years, they hold assets on average only for six years. For trading purposes some assets were even kept only for a few days, hours or minutes.[601]

Thus one could argue that whilst pension funds are about generating long-term performance, ultimately this long-term may be made up of short-term gains. It could be argued that what holds for corporate asset managers who are driven by quarterly profits (see section 2.5.3.2) holds also for pension fund trustees. For example, certain corporate managers may see a CR strategy as an unnecessary expense that impacts current earnings, even when over a period of years that expense may add value. In their view, short-term costs from taking action outweigh long-term benefits. Similarly short-term targets set by pension fund trustees with performance-based fees may incentivize short term gains and obstruct the integration of long-term SRI considerations into portfolio construction. As a result of their annual performance requirement, Swiss pension funds may not ultimately be in a position to act as truly long-term oriented investors and wait until material SRI criteria affect the long-term shareholder value of the companies they are invested in.[602]

6.2.3.2. Portfolio Diversification

As mentioned in section 5.3.2.2, the degree of portfolio diversification is best measured by the average number of corporate holdings included in a pension portfolio. However, for the pension funds in our sample no such information was available, nor could we judge if any of the funds examined would qualify as a universal owner as defined by Hawley and Williams. Even if such information was available, the value of such data would be rather limited as it is unlikely that the funds included in the sample have what Hawley calls universal owner con-

[598] See article 15, § 2, BVG. DC plans therefore combine features of both a DC and DB plan (see Queisser, Whitehouse (2003, p. 8)).

[599] See Graves, Waddock (1994, p. 1035), Greening (1999, p. 567), Mills et al. (2001, p. 35) Ryan, Schneider (2002, p. 560), Hesse (2008, p. 11), Knight, Dixon (2009, p. 24), Johnson, de Graaf (2009, p. 5). Insight Investment states that if fund performance is evaluated over relatively short time horizons, fund managers may be less interested in how longer-term issues such as climate change adaptation affects the companies in which they invest (see Sullivan (2009)).

[600] See O'Barr et al. (1992). A pension fund that acts differently in this regard is the FRR created in 2001, which has both a strong commitment to SRI and an explicit long-term view. In line with the FRR's long-term orientation, fund managers are assessed over five years to overcome short-term focus (Institute for Sustainable Futures, 2005, p. 23).

[601] See Hesse (2008, pp. 4-5)

[602] See Knight, Dixon (2009, p. 25)

sciousness.[603] Examples of pension funds in other countries that have this universal owner consciousness in the sense that they try to factor negative and positive externalities of individual companies, which may impact the overall performance of their portfolio include mainly very large pension funds such as FRR, PGGM, ABP, NGPF, CalPERS, CalSTRS or USS. Although this debate seems way ahead of Swiss pension funds, recent events related to the financial crisis suggest that applying this perspective could have provided a mechanism to address the detrimental portfolio-wide effects of certain errant investment banking activities. However, according to Knight and Dixon it is still questionable whether pension funds are actually capable of effectively employing their strength as universal owners, and thus have the capacity to effect broader changes in investment practice and financial market operation.[604] In particular, as argued in the next section, a possible reason for the limited capacity of pension funds to act as universal owner is that even when large, they seldom have sufficient holdings in a single company to effectively influence the management of the firm.

6.2.3.3. Size of Corporate Holdings

As mentioned in section 5.3.2.2, the degree of leverage a pension fund has on the management of a firm would best be measured as the average percentage of corporate ownership by a pension fund. Unfortunately there are only two funds in our sample that provide details of some of their individual investments.[605] To the extent that corporate holdings by pension funds can be included in various investment vehicles (e.g. indexed products), we agree with Monks who assumes that most pension funds do not even know themselves how much they own in a particular company.[606]

According to Monks and Minow, the holdings of pension funds as a whole are large enough to alleviate the free-rider problem that makes shareholder information and action economically non-rational and therefore imprudent for smaller fiduciaries.[607] However, looking at the Swiss case suggests that very few individual pension funds have sufficiently large holdings of a single company to make shareholder engagement strategies or the threat to divest from a company credible. This can be illustrated by referring to the official data provided by the FSO. From 2004 to 2007 the Swiss pension fund market grew from CHF 484.2 billion to CHF 605.5 billion, which corresponds to 116% of GDP. Over the same period the proportion invested in equities has increased from 27.1 to 27.8%.[608] From this, the share of domestic equities held by the 2’543 Swiss pension funds accounted for CHF 67.2 billion, which corre-

[603] Hawley (2000)
[604] Knight, Dixon (2009, p. 3)
[605] The level of disclosure is also limited among foreign pension funds. Prominent examples of funds that disclose their holdings in detail include the Norwegian Government Pension Fund and the two large Dutch funds ABP and PGGM. According to a report by VBDO (2007), the Dutch Association of Investors for Sustainable Development, only five pension funds in the Netherlands publish an overview of the companies they invest in.
[606] See Monks (2001, p. 87)
[607] See Monks, Minow (2001, p. 122)
[608] See Federal Statistical Office (2009, pp. 14-17)

sponds to approximately 13.4% of the total market capitalization of the Swiss Market Index.[609] Although these assets tend to be concentrated among a relatively small number of larger funds (see Figure 36), an individual fund, even if larger, will probably hold only a minority of the shares in an individual company.[610] This is shown in Table 30. With a combined value of CHF 21.76 billion assets under management, the pension fund of the Canton of Zurich is the third largest fund in our sample. Nevertheless, it holds only 0.1 to 0.4% of the total market equity of the Swiss Market Index companies listed below. Therefore, taking the lead as an activist investor would mean its beneficiaries would bear all the costs of failure and stand only to be rewarded with 0.1 to 0.4% of the gains. According to Monks, this free rider problem would considerably challenge the requirement for prudence by the trustees.[611]

TABLE 30 – THE TEN LARGEST HOLDINGS OF THE CANTON OF ZURICH

Corporate holding	Percentage of Swiss equity portfolio (CHF 2'110.4 m)	Assets invested in companies (in CHF m)	Percentage holdings of companies' market capitalization
Novartis	20.1	424.19	0.28
UBS	19.1	403.09	0.40
Nestlé	16.5	348.22	0.28
Roche	12.3	259.58	0.30
Swiss Re	2.4	50.65	0.19
Richemont	2.0	42.21	0.27
Zurich	1.6	33.77	0.13
Swisscom	1.4	29.55	0.11
Syngenta	1.3	27.44	0.29
Holcim	1.1	23.21	0.20

Source: Annual report of the pension fund of the Canton of Zurich/ Beamtenversicherungskasse des Kantons Zürich (2003, p. 27)

This individual case, as well as the size of the combined assets under management by pension funds in Switzerland, clearly shows that pension funds would benefit from coordinating their efforts when engaging in SRI – both in terms of shareholder engagement and screening.[612] On an international level, institutional investors have already realized this. Prominent initiatives that coordinate their SRI activities include the Interfaith Center for Corporate Responsibility (ICCR)[613], Ceres[614], CDP or the UNPRI. For example, within the PRI framework the signatories coordinate their activities on a wide range of issues such as climate change, human rights,

[609] See Swiss Market Index (2008)

[610] According to Von Arx and Schäfer (2006) another reason for the low size of corporate holdings lies in the fact that for diversification reasons even a sizeable pension fund only holds an individually minor stake in a specific company. See also Oesch (2000, p. 7ff).

[611] See Monks (1995, p. 4)

[612] See Brown (2007, p. 25), Wong et al. (2008, p. 28), Thamotheram, Wildsmith (2006, p. 4)

[613] The ICCR is an association of faith-based investors, including pension funds, that aim for a more just and sustainable world by integrating social values into corporate and investor actions.

[614] Ceres is a network of mainly U.S. based investors and other interest groups working with companies and investors to address sustainability challenges such as global climate change.

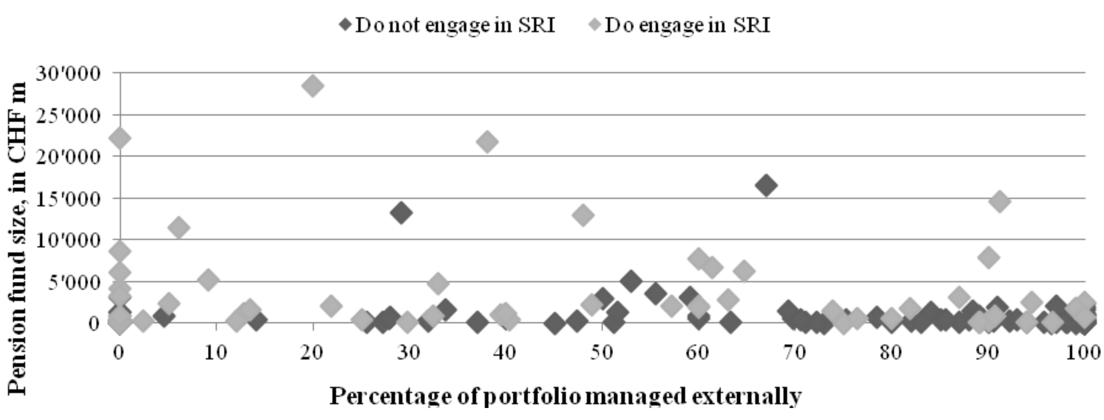
water, corporate governance, executive remuneration, sustainability reporting. According to the PRI: “there are relatively few institutional investors in the world that have the power and legitimacy to individually influence corporate performance on [SRI] issues through the size of their own institutional shareholding alone. The primary objective of the clearing house is to provide signatories with a collaborative forum that can transform one voice into the voice of many”[615]. In Switzerland similar efforts exist in the case of the Ethos Engagement Pool (see section 3.2.1.4). The program engages in the name of its members, in dialogue with the management of Swiss companies on ESG issues, with the aim of enhancing long-term shareholder value for their beneficiaries. Recent cases relating to excessive executive remuneration show that Ethos has become a credible and effective mechanism to hold companies accountable.

6.3. Institutional Characteristics

6.3.1. Reliance on External Asset Managers

In our sample, 133 funds (53.4% of all funds) report that they have part of their portfolio managed externally. In contrast, 53 funds indicate that they manage all of their funds internally. 63 funds did not provide any response to this question. Among the former, the share of the assets managed externally ranges between 2% of the portfolio and 100%. Interestingly, there is an aggregation of 30 funds that have their portfolio completely managed by external asset management services (see Figure 43). These includes not only smaller funds (min CHF 0.02 billion) but also, according to Figure 41, some midsized pension funds (max CHF 2.56 billion). In line with this, but surprisingly, there is no significant relationship between the size of a fund and its reliance on external asset management services (see correlations reported in Table 23). Based on this general finding, but also to the extent that we have no information whether pension funds that engage in SRI manage their SRI assets internally or externally, we cannot conclude as proposed in section 4.2.1 that pension funds that manage their SRI assets internally tend to be larger because economies of scale for establishing the requisite skills and capabilities become relevant.

FIGURE 43 – PERCENTAGE OF PENSION ASSETS MANAGED EXTERNALLY



Source: Based on data from the Swisscanto pension fund survey 2008

[615] See UNEP FI (2008b)

SRI is observed more often in those funds that do not rely on external asset managers. At a bivariate stage, this result is significant for the overall sample, as well as for the private sub-sample but not for the public institutions. At the multivariate stage the result is a significant factor in models 4, 5 and 6 (see Table 25). One can conclude that the survey reveals another distinction between pension funds that engage in SRI and those that do not. While pension funds that engage in SRI rely to a lesser extent on external asset managers, non-SRI investors tend to delegate a larger part of the implementation of their investment strategy to their fund manager. Thus, this finding would be in line with the view of a number of authors who think that investors that outsource a large part of their investment functions to external managers face restrictions in acting as an activist investor or addressing SRI principles.[616] As for the case of the investment consultants (see section 6.1.4) one could argue that for Swiss pension funds, external investment managers act as a deterrent for the wider implementation of a SRI strategy. One could imagine that some external investment managers may explicitly avoid promoting SRI due to their limited expertise in this field, while others may simply not be aware that SRI could be of interest to their clients. Especially larger asset managers who have established in-house SRI capabilities, but who have not yet leveraged this expertise in their interaction with their clients should rethink their approach and call more proactively for SRI.

6.3.2. Level of Disclosure

In our sample 113 funds (45.4% of all funds) report that they inform their beneficiaries about their investment decisions, whereas 71 funds do not. For another 65 funds we do not have any information. Typically the funds that inform their beneficiaries provide this information in the form of an annual report.[617] These reports usually contain information regarding decisions by the board of directors and pension fund governance, the consolidated financial statement including pension assets and liabilities and coverage ratio, investment management including performance of the portfolio, changes in the statutory framework, accounting policies, actuarial statement and the auditor's report, etc. The scope of these sections varies substantially among the different funds. For example, in terms of information on investment management some funds provide detailed information on investment returns by asset classes (incl. background information on market developments that positively or negatively impacted the performance), strategic portfolio weightings and changes in portfolio composition. Some funds also provide detailed information on individual investments (e.g. specific types of funds or mandates), or in very rare cases on individual corporate holdings (see Table 30). The level of disclosure of funds that engage in SRI also differs considerably when disclosing their own SRI practices. While some funds disclose their approach, including their rationale and strategy in detail, (e.g. Canton of Zurich, Canton of Geneva, Nest, Abendrot) other funds include

[616] See Stapledon (1996, p. 34) Del Guercio, Hawkins (1999, p. 301), Cumming, Johan (2007, p. 412) Knoepfel (2009, p. 11)

[617] In addition, 72 funds have also their own internet presence where further information can be obtained (28.9% of all funds). This is particularly so for larger institutions as well as collective funds with open membership.

only minimal (e.g. mentioning an individual SRI fund they are invested in) or even no information.

The majority of the funds that engage in SRI provide their beneficiaries with details of their investment management. Thus the results disclosed in Table 22 partly confirm our hypothesis that pension funds with more transparency regarding investment management practices and decisions are also more likely to engage in SRI. This relationship however is significant only for the public subsample, but not for the overall sample or for the private subsample.[618] Despite these mixed results, one could argue that those public funds that are more transparent tend to be more accountable to their beneficiaries and therefore more likely to respond to specific issues raised by them. To some extent this is supported by the fact that of the 18 funds that report introducing SRI in response to an explicit request of their beneficiaries (see section 6.1.3), 16 funds (88.9%) actually inform their beneficiaries of how they manage their investments. In the light of these results, one could expect that an explicit requirement for greater transparency on how pension funds integrate SRI similar to the U.K. Pension SRI Disclosure Regulation[619] would substantially increase attention among plan participants and as Lydenberg suggests, put pressure on pension funds to recognize their responsibilities in this area.[620] In fact an earlier survey among Swiss pension fund beneficiaries by Furrer and Seidler showed that a considerable majority of the interviewees would welcome additional regulation that would enhance transparency regarding pension funds' investment strategies and practices.[621]

6.3.3. Administrative Form

In Switzerland the large majority of pension funds are funds with closed membership. This is also the case for our sample. As shown in Figure 44, the great majority (88.7%) of funds are characterized by a closed membership (i.e. single employer pension funds or joint foundation funds with closed membership). In contrast only 11.3% of the funds are open to new members (i.e. pooled or open joint foundations). As we have hypothesized in section 4.3.3, we expect open funds to engage more often in SRI to the extent that for them SRI could be a positive differentiating factor to attract employers that want to invest their pension money according to such principles. According to Nest, a pooled foundation with a total of CHF 217 million of assets under management (as of the end of 2007) and which has invested more than 90% of its assets in SRI, the single most important reason for employers to join their institution is the ethical and environmental focus of the fund.[622] Through their strict SRI strategy Nest reflects

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[618] The variable has not been tested in the multivariate analysis, see section 5.4.3.

[619] Similar disclosure requirements exist in Australia, France, Belgium, Germany, Italy and Sweden.

[620] Lydenberg (2002, p. 68)

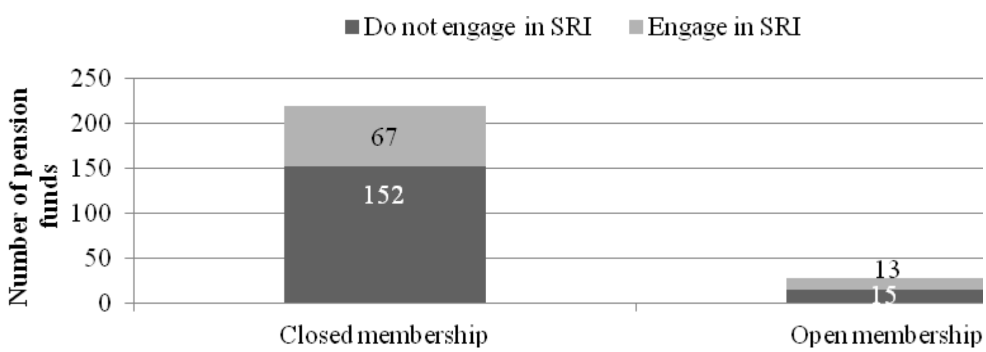
[621] Furrer, Seidler (2006)

[622] See Pfeifer (2008). According to Nest's investment guidelines, its negative investment criteria include nuclear energy, genetic engineering in farming, "disputed" medical genetic engineering, links to the arms trade, money laundering, support of violent regimes, corruption, child labor, alcohol, tobacco, pornography and gambling, violation of fundamental labor and human rights, and insufficient remuneration for indigenous populations (see Bandel (2007)). In addition to the application of negative

the social orientation of the constituent companies (mainly small and medium-sized independent companies from the social work and life sciences sectors) and their wish for competitive returns. Felix Pfeifer, Nest CEO, reports that in recent years the fund has outperformed many competitors and normally ranks above relevant benchmarks such as the Pictet BVG93 for Swiss pension funds. As a result, the number of members grew by 10% to approximately 8'000 in the first half of 2007 alone and by mid 2008 the fund managed assets for about 1'600 companies, including also clients from the high tech sector.[623]

One could expect that the same line of reasoning to also hold for other open funds in Switzerland. However, the data provided by Swisscanto does not confirm that open membership itself is a significant determinant for the SRI behavior of Swiss pension funds. Although the proportion of pension funds with open membership that engage in SRI (46.4%) is on average larger than for those funds with restricted membership (30.6%), bivariate analysis shows (see Table 22) that no significant relationship exists.[624] Thus, one could argue that although SRI may be a differentiating factor for some open funds, which have a clearly defined client base which is responsive to these issues, other funds may be less responsive and may shy away from the initial effort associated with engaging in SRI. However, looking at the evolution of stakeholder expectations with regard to CR, one can see that such concerns are gaining in importance among different stakeholder groups and that it is unlikely that concerns about environmental and social issues will decrease in the future. In this light it could be argued that it is only a matter of time until beneficiaries and/or their employers take account of such factors and integrate them in their evaluation and selection of future pension fund service providers. Pension funds with open membership that address this subject at an early stage may be seen as more credible among prospective clients and profit from a first mover advantage in that area.

FIGURE 44 – DISTRIBUTION OF SWISS PENSION FUNDS WITH CLOSED AND OPEN MEMBERSHIP



Source: Based on data from the Swisscanto pension fund survey 2008

screening criteria for its stock selection, the company also invests in cleantech and renewable energy and manages its real estate portfolio according to sustainability criteria.

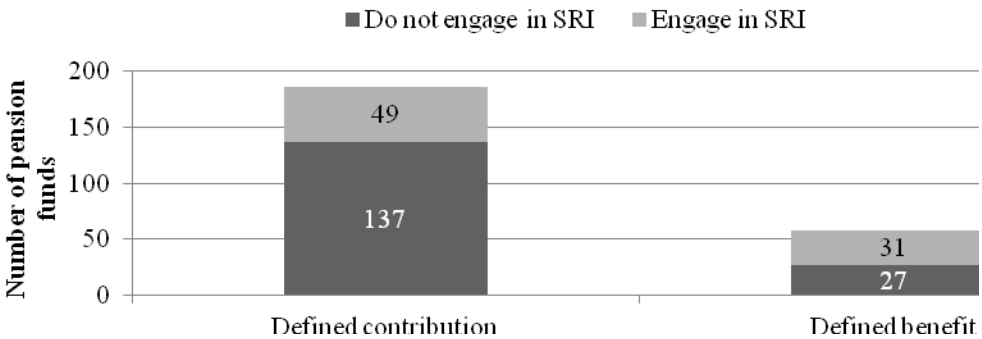
623 Wheelan (2007)

624 This variable has not been tested in the multivariate analysis, see section 5.4.3.

6.3.4. Plan Type

As already shown in section 5.1, our sample consists of 186 funds with a DC plan and 58 pension funds with a DB plan. In Figure 45 it is clear that on average DB plans are more likely to engage in SRI (53.5%) than DC plans (26.3%). This is confirmed by the bivariate analysis, which shows that a positive significant relationship for the entire sample and the public subsample exists (see Table 22/15). However, the results turn out to be statistically insignificant after the inclusion of this variable in a multivariate setting, suggesting that the plan type itself does not serve as a determinant for the SRI behavior of Swiss pension funds (Table 25).

FIGURE 45 – DISTRIBUTION OF SWISS PENSION FUNDS BY PLAN TYPE



Source: based on data from the Swisscanto pension fund survey 2008

Combing the plan type with the financial perception of pension fund trustees regarding SRI, the results for 15.1 (see Table 22/15.1) shows that there is a statistically significant positive relationship that pension funds with a DB plan are more likely to engage in SRI when they have a positive perception of SRI. This confirms our hypothesis that to the extent that for DB plans the investment risk falls mainly back on the employer; DB pension funds are only about to engage in SRI when they see the financial value added from doing this. Unfortunately this relationship has not been tested in a multivariate setting due to the low number of cases.

Finally the results in Table 22/15.2 show that among those public pension funds that can be considered as 'skeptics' in terms of the financial performance of SRI (see section 6.1.1.1), this form of investing is more likely among DC plans, which would confirm our proposed relationship. However, this relationship is not significant for the entire sample. Moreover the private subsample shows a statistically insignificant negative coefficient. To conclude, including the plan type in model 7 (Table 25) of the multivariate stage (which looks only at the 'skeptics'), shows that the plan type does not serve as a determinant to explain the SRI behavior of Swiss pension funds.

7. Conclusion and Research Outlook

In the aftermath of the financial crisis, the issue of corporate governance and CR has received renewed attention. Excessive executive pay, predatory lending practices and the creation of dubious credit and debt products all point to a growing gap between what executives do, and what is in shareholders' interests, and thus a failure of existing monitoring arrangements by external auditors or Boards of Directors. It is in this context that renewed attention has been given to the role that active shareholders could play in increasing transparency and accountability. Yet, shareholders including pension funds have until recently been rather reluctant to directly address companies and engage with management over corporate behavior that is considered unethical, even when this is detrimental to their financial interest. Instead, individual shareowners dissatisfied with management have traditionally found it easier to sell their shares than to express their discontent. Even for large investors who may find it more difficult to pull out of a company, cost-benefit analysis rarely supports the case of an isolated engagement strategy. The portfolio-wide effects of the current crisis show however that divestment is not always an effective option and that investors need to develop strategies to improve the monitoring of corporate behavior.

In this thesis we have shown that the financial sector has a special role in this context to promote CR. In particular, by controlling a large share of societies' savings and promising to provide pension income, pension funds find themselves at the core of the debate on CR. We showed that by their very purpose, pension funds are strongly inclined to address CR issues and concerns, a tendency which has been reinforced by recent pieces of legislation passed in the UK, Australia or Germany. In the light of the financial crisis, recurring events such as the oil spill in the Gulf of Mexico or the impact of climate change, we expect that public concerns about the capacity of pension funds to meet their long-term liabilities will increasingly go hand-in-hand with concerns about the societal impact of their investment decisions. While there is growing awareness among many foreign pension funds which has led to the introduction of comprehensive SRI strategies, in Switzerland pension funds are still reluctant to take on this role in a strategic way. Although data from Swisscanto showed that considerable diversity of approaches and views exist among Swiss pension funds, few funds have so far developed a comprehensive strategy that affects all asset classes. The majority of the SRI investors still restrict their commitment to a small part of their equity portfolio, which either suggests that there is limited understanding among the funds on how to achieve consistency between their SRI practices and their underlying objectives for SRI or that SRI is merely a marketing hoax to please part of the plan participants. Whichever interpretation applies based on this evidence we see considerable market potential for the providers of SRI products and services that are able to address the specific needs of pension funds to set up an effective strategy.

In order to benefit from this market potential, a provider of SRI services needs to understand what drives pension funds when they engage in SRI. In our analysis we challenged conventional wisdom that pension funds are a homogeneous group of investors and showed that they differ in various ways. However in terms of their SRI behavior, one could argue that Swiss pension funds share certain common characteristics which can be used by providers of SRI products and services to predict the probability that pension funds engage in SRI. As shown, a key determinant in this regard concerns the perception of pension fund trustees with regard to the long-term performance, costs and risks involved in investing in SRI. Although there are also some funds that are driven by purely normative reasons, the majority of the funds that engage in SRI do so in an attempt to create long-term added value. The role of the employer also turns out to be a significant factor. In particular, by examining the role of the legal form of pension funds shows that public institutions are more likely to engage in SRI than private institutions, thereby confirming earlier evidence. Although the existence of a mission-related background is not a significant factor, providers of SRI products and services should still make the case for organizational consistency among pension funds where the sponsoring institution has such a background. The same holds for private institutions where pension funds seem more likely to engage in SRI in cases where the employer is committed to similar principles through an established CR strategy. Furthermore, pension funds are also more likely to engage in SRI in cases where beneficiaries actively raise the need for SRI among their trustees (i.e. have better access to decision-making bodies) or when pension fund trustees independently consider SRI as being in the best interest of their plan participants (i.e. independently of their financial perception of SRI). In contrast, the presence of investment consultants or reliance on external asset managers seems to act as an obstacle to the development of a SRI strategy, which again would open up additional opportunities for specialist providers of SRI services. The results show that certain characteristics that are commonly considered as key factors for the SRI engagement of pension funds, such as their size, coverage ratio or plan type apparently do not play a role in the Swiss context. In particular, with regard to size the data showed that also smaller and mid-sized funds successfully managed to implement a comprehensive SRI strategy and that this is not restricted to a small circle of large or very large institutions that have sufficient resources to address the subject. To the extent that the Swiss pension fund market consists mainly of many smaller institutions, this again makes the case that there is abundant market potential in this area.

Based on these summary findings it becomes clear there are different stakeholder groups, including pension fund trustees themselves, regulators, beneficiaries and employers that can contribute to the promotion of greater awareness among pension funds in their role as responsible investors and overcome existing hurdles. At the forefront however, we believe asset managers and consultancies should develop a convincing business case for SRI and in cases where pension funds are also driven by normative rationales, appropriately factor ethical considerations into such a SRI strategy. SRI does not sell itself, but requires active as well as professional support from the suppliers of the respective products.

7.1. Research Outlook

Apart from addressing the shortcomings of the present study, the conclusions made in this thesis can be helpful in making predictions about appropriate SRI investment strategies for pension funds based on their specific motivation or rationale for SRI. In particular, one could use the general framework developed in sections 2.4.2 and 2.5, which described the different motivations of SRI investors, as well as the effectiveness of different SRI strategies in meeting these motivations, as a benchmark for evaluating the plausibility of the specific SRI behavior of Swiss pension funds in response to the ethical and financial motivations underlying their decision to invest in SRI. As has been shown empirically throughout this thesis, there is a considerable diversity of motivations, as well as SRI practices available among Swiss pension funds. Although the financial rationale clearly dominates, we provided evidence that in some cases there are also normative motivations underlying their SRI engagement. In addition, we showed that Swiss pension funds apply a wide range of different strategies including those which have been traditionally preferred by ethically minded investors, rather than conventional institutional investors such as pension funds. While we have conceptually sketched out the effectiveness of different SRI products and services in response to these motivations, it is still unclear to what extent pension funds that engage in SRI are actually aware of the effectiveness of their SRI strategy in meeting their own objectives. Greater transparency with regard to this question will most likely also show that specific pension fund characteristics (e.g. size, investment horizon) are directly related to the degree of effectiveness of certain SRI strategies.

Aside from purely academic interest, this question is also crucial for providers of SRI products, who too often attract clients by promising them that they can put their money to work to build a better future, as well as to understand the contribution that SRI can make to the pursuit of sustainability. If SRI is to fulfill investors' expectations and not bring about disillusionment, greater clarity about what it can actually deliver is required. Thus answering this question could provide a significant contribution to the further strengthening and development of SRI, by improving the design of SRI strategies of pension funds, identifying instruments that are compatible with the specific motivations that drive a particular SRI strategy and designing innovative and more effective SRI products.

8. APPENDIX

8.1. SWISSCANTO PENSION FUND SURVEY 2008

A:	**STRUKTURANGABEN DER VORSORGEEINRICHTUNG**	
1.	**Name und Adresse der VE**	
2.	**Rechtsform**	**Ja**
2.1	Öffentlich-rechtliche VE mit voller Garantie des Arbeitgebers	
2.2	Öffentlich-rechtliche VE mit teilweiser Garantie des Arbeitgebers	
2.3	Öffentlich-rechtliche VE ohne Garantie des Arbeitgebers	
2.4	Privat-rechtliche VE (Stiftung oder Genossenschaft)	
3.	**Registrierung**	
3.1	Die VE ist registriert gemäss Art. 48 BVG	Ja / Nein
4.	**Anzahl der Arbeitgeber (AG)**	
4.1	Anzahl der angeschlossenen Arbeitgeber (Firmengruppe gilt als 1 AG)	2006 / 2007
5.	**Wichtigster Arbeitgeber**	**Ja**
5.1	Bund	
5.2	Kanton	
5.3	Gemeinde/Stadt	
5.4	Sonstiger öffentlich-rechtlicher Arbeitgeber	
5.5	Privat-rechtlicher Arbeitgeber	
5.6	Keine Angabe möglich	
6.	**Verwaltungsform / Risikoträger**	
6.1	Pensionskasse oder geschlossene Gemeinschaftsstiftung einer Firmengruppe (Konzern) / eines Gemeinwesens	autonom teilautonom
6.2	Offene Gemeinschaftsstiftung	voll rückgedeckt
6.3	Sammelstiftung autonom	
7.	**Sammel- und Gemeinschaftsstiftung**	**Ja**
7.1	Gründer	
7.11	Firma oder Firmengruppe	
7.12	Versicherung	
7.13	Bank	
7.14	Beratungsunternehmen	
7.15	Verband	
7.16	Gemeinwesen	
7.17	Andere	welche:
7.2	Anzahl Anschlussverträge	
8.	**Vorsorgevermögen / Anzahl Versicherte**	
8.1	Vorsorgevermögen gemäss Art. 44 BVV2 (inkl. Rückkaufswerte aus Versicherungsverträgen) in Mio.CHF	2006 / 2007
8.2	Anzahl aktiv Versicherte	
8.3	Anzahl Bezüger von Altersrenten	
8.4	Anzahl Bezüger von Invalidenrenten	
8.5	Anzahl Kinderrenten	
8.6	Anzahl Ehegatten -und Partnerrenten	

9.	**Primat der Vorsorgepläne (Falls mehrere Vorsorgepläne angeboten werden: Primat des wichtigsten P)**	
9.5	Wieviele Vorsorgepläne gibt es neben dem Standardplan?	
9.51	Welcher Prozentsatz der Versicherten hat einen vom Standardplan abweichenden Plan gewählt?	in %
10.	**Gründungsjahr**	
10.1	Gründungsjahr der VE	
11.	**Wirtschaftsbranche des Arbeitgebers gemäss Eidg. Betriebszählung (Wichtigste Branche angeben, wenn stark diversifiziert, „Diverse“ ankreuzen)**	**Ja**
11.01	Bank	
11.02	Bau	
11.03	Beratung, Planung	
11.04	Chemie, Pharma	
11.05	Detailhandel	
11.06	Elektrizität, Energie	
11.07	Elektroindustrie	
11.08	Elektronik	
11.09	Energieversorgung	
11.10	Erdöl	
11.11	Gesundheitswesen	
11.12	Handel	
11.13	Holding	
11.14	Informatik	
11.15	Kirche	
11.16	Kosmetik	
11.17	Kunststoffverarbeitung	
11.18	Lebensmittel	
11.19	Maschinen	
11.20	Metallindustrie	
11.21	Öff.rechtl. Institution	
11.22	Papierindustrie	
11.23	Telekommunikation	
11.24	Textilindustrie	
11.25	Transport	
11.26	Übrige Dienstleistungen	
11.27	Übrige Industrien	
11.28	Verlag, Druckerei, Grafik	
11.29	Vermögensverwaltung	
11.30	Verpackung	
11.31	Versicherung	
11.32	Werbung	
11.32	Andere Branche	
11.34	Diverse	
B:	**BILANZ / TECHNISCHE ANGABEN**	
12.	**Bilanz / technische Angaben**	
12.1	Bilanz per	
12.11	Aktiven	

12.12	Passiven	
13.	**Anlageformen und Vermögensverwaltung* (in % der gesamten Anlagen; muss nicht 100% geben)**	**% / n.v.**
13.01	Anlagestiftungen	
13.02	Anlagefonds	
13.03	Beteiligungsgesellschaften	
13.11	Kategorienmandate	
13.12	Gemischte Mandat.	
13.21	Indexanlagen	
13.22	**Nachhaltige Anlagen**	
13.23	Strukturierte Produkte	
13.31	Immobilien Schweiz: direkte Anlagen	
13.32	Immobilien Schweiz: indirekte Anlagen	
13.33	Immobilien Ausland: direkte Anlagen	
13.34	Immobilien Ausland: indirekte Anlagen Interne / Externe Verwaltung	
13.41	Anteil des intern verwalteten Vermögens (VE)	
13.42	Anteil des beim Arbeitgeber verwalteten Vermögens	
13.43	Anteil des extern verwalteten Vermögens	
	Falls Fragestellung nicht sinnvoll, bitte n.v. (nicht verfügbar) wählen	
14.	**Ist / Ziel-Struktur der Vermögensanlagen ***	**Ist / Ziel in %**
14.1	Flüssige Mittel	
14.2	Anlagen beim Arbeitgeber	
14.21	Forderungen	
14.22	Aktien und sonstige Beteiligungen	
14.3	Obligationen und Kassenscheine	
14.31	in CHF	
14.32	in Fremdwährungen	
14.4	Hypotheken	
14.5	Liegenschaften	
14.51	Immobilienanlagen in der Schweiz	
14.52	Immobilienanlagen im Ausland	
14.6	Aktien	
14.61	Inland	
14.62	Ausland	
14.7	Alternative Anlagen	
14.71	Private Equity	
14.72	Hedge Funds	
14.73	Rohstoffe	
14.74	Andere	
14.8	Übrige Aktiven	
	Total Aktiven	
14.9	n.v. (Stiftungen mit voller Rückdeckung)	n.v.
15.	**Deckungsgrad (bei mehreren Vorsorgewerken DG für gesamte VE angeben)**	**31.12.2006 / 31.12.2007**
15.1	Deckungsgrad gemäss BVV2	
15.2	Wertschwankungsreserven in % des Vorsorgevermögens	
15.3		
	Privatrechtliche oder öffentlich-rechtliche VE ohne Staatsgarantie: Zieldeckungsgrad (100% plus Sollwert der Wertschwankungsreserven in % des	

	Vorsorgevermögens)	
15.4	VE mit Staatsgarantie: Zieldeckungsgrad inkl. Wertschwankungsreserven	
16.	**Technischer Zinssatz (nicht BVG-Zinssatz)**	
16.1	Leistungsprimat: technischer Zinssatz (für Altersleistungen)	**31.12.2006 / 31.12.2007**
16.2	Beitragsprimat: Zinssatz der Rentnerdeckungskapitalien (Wenn unterschiedliche Tarifgenerationen gleichzeitig angewendet werden, bitte Zinssatz der neuesten Generation angeben)	
17.	**Biometrische Grundlagen**	**Ja**
17.1	EVK 2000	
17.2	VZ 2000	
17.3	BVG 2000	
17.4	BVG 2005	
17.5	GRM / GRF	
17.6	Eigener Tarif	
17.7	Andere	welche?
18.	**Rückstellungen(Zuschlag pro Jahr auf den Barwerten für die erwartete Zunahme der Lebenserwartung); falls Angaben nicht verfügbar, bitte n.v. wählen**	
18.1	für Aktive % des Altersguthabens bzw. Deckungskapitals / n.v.	% / n.v.
18.2	für Rentner % des Deckungskapitals / n.v.	% / n.v.
19.	**Vorsorgekapital (gebundenes Kapital); (Deckungskapital plus technische Rückstellungen, ohne Wertschwankungsreserven); *) falls Angaben nicht verfügbar, bitte n.v. wählen**	**CHF / n.v.**
19.1	Höhe des Vorsorgekapitals per Ende 2006 (Vorjahr)	
19.2	Vorsorgekapital der aktiven Versicherten per Ende 2007	
19.21	davon Altersguthaben gemäss BVG	
19.3	Vorsorgekapital der Rentenbezüger per Ende 2007	
19.4	Passiven aus Versicherungsverträgen	
19.5	Technische Rückstellungen (soweit nicht in obigen Vorsorgekapitalien enthalten)	
19.6	Ausserordentliche Veränderungen im Jahre 2007 beim Vorsorgekapital (z.B. Verteilung freier Mittel, ausserordentliche vorzeitige Pensionierung etc.)	
C:	**BETRIEBSRECHNUNG**	
20.	**Durchführung der Verwaltung und Kostenträger (AG=Arbeitgeber, VE=Vorsorgeeinrichtung, EX=Extern)**	
20.1	Versichertenverwaltung vorwiegend durch AG	VE / EX / Versicherungsges.
20.2	Rechnungswesen vorwiegend durch AG	VE / EX / Versicherungsges
20.3	VE trägt Kosten der Verwaltung ganz	Teilweise Kosten trägt AG
21.	**Verwaltungskosten und Marketing (gemäss Swiss GAAP FER 26)**	**CHF / n.v.**
21.1	Kosten für die allgemeine Verwaltung (technische Verwaltung, Rechnungswesen, Beratung)	
21.2	Kosten für die Vermögensverwaltung	
21.21	wovon für Wertschriften	
21.22	wovon für direkte Immobilienanlagen	

21.3	Aufwand für Marketing (Werbung, Akquisition)	
22.	**Beiträge, Ein- und Auszahlung von Vorsorgemitteln (falls nicht in Jahresrechnung, bitte schätzen oder nicht verfügbar (n.v.) angeben)**	**2006 in CHF / 2007 in CHF / n.v.**
22.1	Beiträge der Arbeitnehmer (inkl. Nachzahlungen)	
22.11	davon für die Altersvorsorge	
22.2	Beiträge des Arbeitgebers (inkl. Nachzahlungen)	
22.21	davon für die Altersvorsorge	
22.3	Einkäufe	
22.4	Eingebrachte Freizügigkeitsleistungen	
22.5	Ausbezahlte Leistungen in Rentenform	
22.6	Ausbezahlte Leistungen in Kapitalform	
22.7	Ausbezahlte Freizügigkeitsleistungen	
22.8	Ausbezahlte Vorbezüge für Wohneigentum	
22.9	Ausbezahlte Vorbezüge für Scheidung	
23.	**Performance auf dem Gesamtvermögen (inkl. Immobilien und nach Abzug der Vermögensverwaltungskosten)**	
23.1	Jährliche Performance	% / n.v.
23.11	Performance 2000	% / n.v.
23.12	Performance 2001 % n.v.	% / n.v.
23.13	Performance 2002 % n.v.	% / n.v.
23.14	Performance 2003 % n.v.	% / n.v.
23.15	Performance 2004 % n.v.	% / n.v.
23.16	Performance 2005 % n.v.	% / n.v.
23.17	Performance 2006 % n.v.	% / n.v.
23.18	Performance 2007 % n.v.	% / n.v.
23.2	Zielrendite (angestrebte Performance auf dem Gesamtvermögen)	% p.a. / n.v.
23.3	Sollrendite (Kapitalerträge, welche notwendig sind, um den Deckungsgrad konstant zu halten)	% p.a. / n.v.
D:	**BEITRÄGE UND LEISTUNGEN**	
24.	**Finanzierung der Vorsorge (bei mehreren Vorsorgeplänen, Plan mit grösstem Beitragsvolumen)**	**2006 / 2007 / n.v.**
24.1	Ordentlicher Arbeitnehmerbeitrag in % des versicherten Lohns für einen Mann mit Alter 45 gemäss Reglement n.v. n.v.	
24.2	Ordentlicher Arbeitgeberbeitrag in % des versicherten Lohns für einen Mann mit Alter 45 gemäss Reglement	
25.	**Pensionierung (allenfalls Durchschnittswerte)**	
25.1	Ordentliches Rücktrittsalter	Reglement 2006
25.11	Männer	Reglement 2007
25.12	Frauen	Reglement 2008
25.2	Vorzeitiger oder flexibler Rücktritt möglich ab Alter (Jahre)	Reglement 2006
25.21	Männer	Reglement 2007
25.22	Frauen	Reglement 2008
25.23	Besteht eine Überbrückungsrente	Ja / Nein
25.231	wenn ja, wird diese voll vom Versicherten finanziert	Ja / Nein
25.24	Rentenkürzung erfolgt versicherungstechnisch neutral	Ja / Nein
25.241	wenn nein, ausgleichende Finanzierung erfolgt durch	AG / VE / / AG+VE
25.3	Rücktritt nach ordentlichem Rücktrittsalter möglich bis Alter	
25.31	Männer	n.v.

25.32	Frauen	n.v.
26.	**Einkauf von Leistungen**	
26.1	Reglementarische Leistungen	
26.11	Nur bei Eintritt in die Vorsorgeeinrichtung (Art. 9 FZG)	Ja
26.12	Bei Eintritt wie auch zu einem späteren Zeitpunkt	Ja
26.2	Vorzeitiger Rücktritt	Ja
26.3	AHV-Überbrückungsrente	Ja
26.4	andere,	welche
27.	**Teuerungsausgleich**	
27.1	Besteht zusätzlich zum Mindestteuerungsausgleich gemäss BVG ein reglementarischer Anspruch auf Teuerungsausgleich?	Ja / Nein
27.11	falls ja, auf vollen Ausgleich?	Ja / Nein
27.2	Wurden die Renten erhöht für 2007 / 2008	Ja / Nein
28.	**Leistungsziel**	
28.1	Besteht ein Leistungsziel für die Höhe der Altersrente? Ja Nein	Ja / Nein
28.11	falls ja, Höhe des Leistungsziels für eine Altersrente (exkl. AHV, volle Beitragsdauer) bei einem AHV-Endlohn von CHF 80'000?	CHF
29.	**Koordinationsabzug (bei mehreren Vorsorgeplänen, Plan mit grösstem Beitragsvolumen)**	
29.1	Koordinationsabzug gemäss BVG	
29.2	Fixer Koordinationsabzug, jedoch nicht gemäss BVG	
29.2	Koordinationsabzug variabel (z.B. lohnabhängig)	
29.4	Kein Koordinationsabzug	
29.5	n.v	
30.	**Verzinsung des Sparkapitals (allenfalls Schätzungen und Durchschnitte)**	**2007 / 2008**
30.1	bei umhüllender Vorsorge (gesamtes Sparkapital)	% / %
30.2	bei gesplitteter Vorsorge	% / %
30.21	BVG-Altersguthaben	% / %
30.22	überobligatorisches Sparkapital	% / %
30.3	Reglementarische Mindestverzinsung der Altersguthaben (Aktive)	% / %
31.	**Umwandlungssatz im ordentlichen Rücktrittsalter**	**2007 / 2008**
31.1	bei umhüllender Vorsorge	% / %
31.11	Männer	% / %
31.12	Frauen	% / %
31.2	bei gesplitteter Vorsorge	% / %
31.21	BVG-Altersguthaben Männer	% / %
31.22	Frauen	% / %
31.23	übriges Sparkapital Männer	% / %
31.24	Frauen	% / %
E:	**AKTUELLE VORSORGEPOLITISCHE FRAGEN**	
32.1	Nach welcher Methode wurde die angegebene Performance auf den Vermögenswerten erhoben?	
32.11	Endwert durch Anfangswert (nach Ein- und Auszahlungen)	Ja
32.12	Zeitgewichtete Performance	Ja
32.13	Geldgewichtete Performance (Berücksichtigung von Ein- und Auszahlungen)	Ja
32.14	Modified Dietz	Ja

32.15	Andere, welche?	Ja
32.2	Wie wurden die Immobilienanlagen bewertet?	
32.21	Sachwertmethode (Substanz- bzw. Realwert)	Ja
32.22	Ertragswertmethode (Barwert- oder Discounted Cash Flow Methode)	Ja
32.23	Vergleichsmethode (Statistische oder Hedonische Methode)	Ja
32.24	Andere, welche?	Ja
32.3	Wenn ja, messen Sie die Performance relativ zu einer Benchmark?	Ja / Nein
32.31	Gegenüber einem Index aus der Pictet Indexfamilie? Ja	
32.311	Welchem?	
32.32	Gegenüber individuell definierten Benchmarks pro Anlageklasse?	Ja
32.4	Wie wird die Messung durchgeführt?	Intern / extern
32.41	Wenn intern, wird ein extern entwickeltes Messsystem eingesetzt?	Ja / Nein
33.	**Nachhaltige Anlagen**	
33.1	Gibt es einen in den Anlagerichtlinien definierten Ziel-Anteil nachhaltiger Anlagen	Ja / Nein
33.11	Wenn ja, wie hoch ist er?	%
33.2	Welcher IST-Anteil des Gesamtvermögens der VE ist gezielt nach nachhaltigen Kriterien investiert?	%
33.3	Welcher Anteil des Gesamtvermögens der VE ist via nachhaltige Anlagegefässe oder Mandate investiert?	%
33.31	Obligationen Schweiz	n.v.
33.32	Obligationen Fremdwährungen	n.v.
33.33	Aktien Schweiz	n.v.
33.34	Aktien Ausland	n.v.
33.35	Gemischte Anlagen	n.v.
33.36	Andere, welche	n.v.
33.4	Welche Formen nachhaltigen Anlegens werden angewendet?	
33.41	Negative Anlagekriterien, d.h. Ausschluss "problematischer" Branchen oder Bereiche, Welche	Ja
33.411	Rüstung/Waffen	Ja
33.412	Tabak	Ja
33.413	Alkohol	Ja
33.414	Spielcasinos	Ja
33.415	Kernenergie	Ja
33.416	Fossile Energieträger (Erdöl, Kohle, Erdgas)	Ja
33.417	Gentechnik in der Landwirtschaft	Ja
33.418	Airlines	Ja
33.419	Automobile	Ja
33.420	Andere, welche	Ja
33.42	Positive Anlagekriterien, d.h. Wahl der Besten aus jeder Branche [best in class]	Ja
33.43	Investitionen in nachhaltige Anlagethemen (Klima, Wasser, erneuerbare Energie)	Ja
33.44	Aktive Wahrnehmung der Stimmrechte (proxy voting) unter Berücksichtigung von nachhaltigen Grundsätzen	Ja / Nein
33.441	Wenn ja,	allein / kollektiv
33.45	Gezielte Einflussnahme als Aktionär auf Unternehmen unter Berücksichti-	Ja / Nein

	gung von nachhaltigen Grundsätzen (engagement)	
33.451	Wenn ja,	allein / kollektiv
33.5	Welche Aussagen treffen im Zusammenhang mit der Anwendung von Nachhaltigkeitskriterien für die VE zu?	
33.51	Anwendung ergibt sich aus dem Zweck, der Haltung des AG (z.B. Kirche, Hilfsorganisation)	
33.52	VE folgt mit der Anwendung einem Wunsch der Destinatäre	
33.53	VE hat Meinung, dass Anwendung nachhaltiger Kriterien einer Verantwortung der VE gegenüber den Destinatären entspricht	
33.54	VE hat Meinung, dass Berücksichtigung der Kriterien zu längerfristig höheren Renditen führt	trifft auf VE zu trifft auf VE nicht zu
33.55	VE hat Meinung, dass nachhaltiges Anlegen mit zu hohen Kosten verbunden ist	keine Aussage
33.56	VE hat Meinung, dass nachhaltige Anlagen ein zu hohes Risiko aufweisen	
33.57	VE hat Meinung, dass der Nachhaltigkeitsgedanke auf das gesamte Portfolio anzuwenden ist.	
33.58	VE hat Meinung, dass ein reglementarisch vorgeschriebener Anteil an nachhaltigen Anlagen nicht zweckmässig ist	
33.59	Andere	
34.	**Anlagestrategie**	
34.1	Wie hoch war die Aktienquote per 31.12.2006	% / n.v.
34.2	Wie hoch war die Aktienquote per 30.06.2007	% / n.v.
34.3	Wie hat sich die VE im 2. Semester 2007 bezüglich Aktienbestand verhalten?	netto zugekauft netto verkauft weder noch nicht bekannt
35.	**Mindestzins**	
35.1	Halten Sie den BVG-Mindestzins für 2008 mit 2.75% für	zu tief / richtig / zu hoch
35.2	Kommentar	
36.	**Aktueller Deckungsgrad**	
36.1	Wie hoch ist der Deckungsgrad per Ende Februar (geschätzt)	% / n.v.

8.2. PARTICIPATING PENSION FUNDS

Pension Fund	IA (in CHF m)
▪ Aargauische Pensionskasse	6'274
▪ ABB Pensionskasse	3'240
▪ ALRIVO Vorsorgestiftung	79
▪ Ascom Pensionskasse	1'344
▪ ASGA Pensionskasse	6'099
▪ Bachmann-Stiftung für Personalvorsorge	1
▪ Basellandschaftliche Pensionskasse BLPK	5'247
▪ Baumann Personalvorsorge	155
▪ Bernische Lehrerversicherungskasse BLVK	5'070
▪ Bernische Pensionskasse (BPK)	8'600
▪ Bossard Personalstiftung	134
▪ BVG-Sammelstiftung der Rentenanstalt	19'604
▪ BVG-Stiftung der Cementia Holding AG	2
▪ BVG-Stiftung der Plaston AG	13
▪ BVG-Stiftung der SV Group	204
▪ BVG-Stiftung der Tschudin + Heid AG	20
▪ BVK Personalvorsorge des Kantons Zürich	21'759
▪ Caisse de pension du personnel de l'Etat du Valais	1'382
▪ Caisse de pension du personnel de la commune de Monthey	37
▪ Caisse de pension du personnel de l'Etat de Fribourg	2'561
▪ Caisse de pensions CAP	2'801
▪ Caisse de Pensions de l'Etat de Vaud	7'668
▪ Caisse de Pensions de la Banque Cantonale Vaudoise	1'284
▪ Caisse de pensions de la Collectivité catholique-romaine de Canton du Jura	27
▪ Caisse de pensions de la République et Canton du Jura	1'056
▪ Caisse de pensions de Romande Energie	455
▪ Caisse de Pensions Philip Morris en Suisse	1'818
▪ Caisse de pensions SSPh	639
▪ Caisse de pensions Swatch Group (CPK)	3'223
▪ Caisse de prévoyance CEH etablissements publics médicaux	2'664
▪ Caisse de prévoyance en faveur du personnel de la société Eskenazi SA	9
▪ Caisse de retraite d'Audemars Piguet Holding et ses Sociétés affiliées	75
▪ Caisse de retraite de PubliGroupe	801
▪ Caisse de retraite de Rham Holding	34
▪ Caisse de retraite du Groupe DSR	126
▪ Caisse de retraite du personnel de la Banque Cantonale du Valais	180
▪ Caisse de retraite du personnel enseignant du Valais	842
▪ Caisse de Retraite en faveur du personnel du Groupe SICPA en Suisse	112
▪ Caisse Intercommunale de Pensions	2'112
▪ CAPREVI - Prévoyance Caterpillar	570
▪ Cassa pensioni dei dipendenti dello Stato	3'122
▪ CIA - Caisse de prévoyance	6'395

- CIEPP Caisse Inter-Entreprises de Prévoyance Professionnelle 2'874
- Clariant Pensionsstiftung 927
- Comunitas Vorsorgestiftung 1'563
- CPV/CAP Coop Personalversicherung 6'653
- Emmi Vorsorgestiftung 595
- Fondation de Prévoyance de la Nouvelle Compaigne de Reassurance 52
- Fondation de prévoyance Edipresse 527
- Fondation de prévoyance en faveur de l'encadrement supérieur de la BCV 24
- Fondation de prévoyance LPP Mirabaud 96
- Fondation de prévoyance Manpower 100
- Fonds de prévoyance en faveur du personnel de l'Association St-Camille 14
- Fonds de Prévoyance et de Secours de Beau-Rivage Palace SA 3
- Galenica Personalvorsorgestiftung 508
- GaleniCare Personalvorsorgestiftung 88
- GastroSocial Pensionskasse 3'510
- Gemeinschaftsstiftung der Geberit Gruppe 263
- Gemini Sammelstiftung zur Förderung der Personalvorsorge 2'031
- Groupe Mutuel Prévoyance 379
- Hiag Pensionskasse 308
- Institution de Prévoyance ILFORD Suisse 185
- Kantonale Pensionskasse Graubünden 2'120
- Kantonale Pensionskasse Schaffhausen 1'672
- Kantonale Pensionskasse Solothurn 2'476
- KPMG Personalvorsorgestiftung 410
- Luzerner Pensionskasse 4'773
- Mettler-Toledo Pensionskasse 386
- MPK Migros-Pensionskasse 16'578
- Mutuelle Valaisanne de Prévoyance 353
- Orell Füssli-Stiftung 115
- Pensionkasse Swiss Dairy Food AG 290
- Pensionsfonds der Shell (Switzerland) 914
- Pensionskasse Alcan Schweiz 1'480
- Pensionskasse Alstom Schweiz 937
- Pensionskasse Appenzell Ausserrhoden 644
- Pensionskasse Basel-Stadt 7'900
- Pensionskasse Baumann, Koelliker AG 55
- Pensionskasse Bosch Schweiz 882
- Pensionskasse Concordia 278
- Pensionskasse Conzzeta 398
- Pensionskasse der Antalis AG 100
- Pensionskasse der Arab Bank (Switzerland) 87
- Pensionskasse der ASCOOP 2'264
- Pensionskasse der Baloise Bank SoBa 123
- Pensionskasse der Bank Sarasin & Cie AG 403
- Pensionskasse der BEKB | BCBE 795
- Pensionskasse der Berner Versicherungs-Gruppe 824
- Pensionskasse der Bernischen Kraftwerke (PK BKW) 1'390

▪ Pensionskasse der Borregaard Schweiz AG	132
▪ Pensionskasse der CSG (Schweiz) Credit Suisse Group	11'453
▪ Pensionskasse der Danzas Gesellschaften in der Schweiz	496
▪ Pensionskasse der Dätwyler Holding AG	283
▪ Pensionskasse der ehemaligen Asklia-Gruppe	38
▪ Pensionskasse der Electrolux AG	147
▪ Pensionskasse der Electrolux Schwanden AG	104
▪ Pensionskasse der Elektro-Material AG	134
▪ Pensionskasse der Firma Christian Fischbacher Co. AG	66
▪ Pensionskasse der Firma L. Kellenberger & Co. AG	42
▪ Pensionskasse der Flawa AG	24
▪ Pensionskasse der Gemeinde Kilchberg	73
▪ Pensionskasse der Gemeinde Steffisburg	42
▪ Pensionskasse der Gemeinde Thalwil	104
▪ Pensionskasse der Griesser AG	110
▪ Pensionskasse der Hewlett-Packard Gesellschaften in der Schweiz	1'076
▪ Pensionskasse der JohnsonDiversey	105
▪ Pensionskasse der Julius Bär Gruppe	910
▪ Pensionskasse der Luzerner Kantonalbank	407
▪ Pensionskasse der MBA AG	32
▪ Pensionskasse der OBT AG	91
▪ Pensionskasse der Oerlikon Contraves AG	1'263
▪ Pensionskasse der Papierfabriken Biberist und Utzenstorf	316
▪ Pensionskasse der Papierfabriken Cham-Tenero AG	116
▪ Pensionskasse der Pestalozzi-Gruppe	119
▪ Pensionskasse der Pilatus Flugzeugwerke AG	222
▪ Pensionskasse der Politischen Gemeinde Küsnacht	174
▪ Pensionskasse der PricewaterhouseCoopers	425
▪ Pensionskasse der Rhätischen Bahn	499
▪ Pensionskasse der römisch-katholischen Landeskirche des Kantons Aargau	127
▪ Pensionskasse der Schweizerischen Nationalbank	636
▪ Pensionskasse der sia Abrasives	124
▪ Pensionskasse der Siemens-Gesellschaften in der Schweiz	3'148
▪ Pensionskasse der Stadt Frauenfeld	106
▪ Pensionskasse der Stadt Luzern	1'139
▪ Pensionskasse der Tamedia AG	905
▪ Pensionskasse der Technischen Verbände	1'434
▪ Pensionskasse der Thurgauer Kantonalbank	278
▪ Pensionskasse der T-Systems Schweiz AG	217
▪ Pensionskasse der UBS	22'181
▪ Pensionskasse der Zürcher Kantonalbank	2'343
▪ Pensionskasse des Kantons Glarus	472
▪ Pensionskasse des Kantons Nidwalden	477
▪ Pensionskasse des Kantons Schwyz	1'411
▪ Pensionskasse EBM	216
▪ Pensionskasse ELCO	142
▪ Pensionskasse Emil Frey Gruppe	533

▪ Pensionskasse Eternit	202
▪ Pensionskasse für die Mitarbeitenden der Gruppe Mobiliar	785
▪ Pensionskasse Gemeinde Köniz	228
▪ Pensionskasse Georg Fischer	792
▪ Pensionskasse Haco	207
▪ Pensionskasse Jumbo	134
▪ Pensionskasse Kraft Foods Schweiz	599
▪ Pensionskasse Novartis	13'969
▪ Pensionskasse Philips AG	421
▪ Pensionskasse Post	12'947
▪ Pensionskasse Pro Senectute	44
▪ Pensionskasse Profaro	347
▪ Pensionskasse SBB	13'294
▪ Pensionskasse Schreinergewerbe	299
▪ Pensionskasse SRG SSR idée suisse	1'779
▪ Pensionskasse St.Galler Gemeinden	1'057
▪ Pensionskasse Stadt Zürich (PKZH)	14'572
▪ Pensionskasse Swiss Re	3'125
▪ Pensionskasse Thurgau	2'429
▪ Pensionskasse transGourmet Schweiz AG	107
▪ Pensionskasse Wasserwerke Zug	117
▪ Pensionskasse Weitnauer	109
▪ Pensionskasse ZAF	204
▪ Personalfürsorgestiftung der 3M Firmen in der Schweiz	257
▪ Personalfürsorgestiftung der Chocolat Bernrain AG	19
▪ Personalfürsorgestiftung der Firma Xerox AG	95
▪ Personalfürsorgestiftung der Lenzlinger Söhne AG	36
▪ Personalfürsorgestiftung der Panalpina (Holding)	226
▪ Personalfürsorgestiftung der Plaston AG	8
▪ Personalfürsorgestiftung der Ritter AG	0
▪ Personalfürsorgestiftung der Spichtig AG	3
▪ Personalfürsorgestiftung der Streuli Pharma AG	37
▪ Personalfürsorgestiftungen der Alcan-Gesellschaften in der Schweiz	145
▪ Personalstiftung der Baumer Gruppe	60
▪ Personalstiftung der Leder Locher AG	10
▪ Personalstiftung der Rothschild Bank AG	131
▪ Personalvorsorge der Klinik Hirslanden AG	471
▪ Personalvorsorgekasse der Glarner Kantonalbank	4
▪ Personalvorsorgekasse der Ortsbürgergemeinde St.Gallen	75
▪ Personalvorsorgekasse der Stadt Bern	1'960
▪ Personalvorsorgestiftung Atlas Copco (Schweiz) AG	38
▪ Personalvorsorgestiftung création baumann Bern	35
▪ Personalvorsorgestiftung der Adval Tech Holding AG	158
▪ Personalvorsorgestiftung der Albers Gruppe	56
▪ Personalvorsorgestiftung der Aluminium-Laufen AG	79
▪ Personalvorsorgestiftung der Bachofen AG	77
▪ Personalvorsorgestiftung der Baer AG	44

- Personalvorsorgestiftung der Cargologic AG 91
- Personalvorsorgestiftung der CSS Versicherung 366
- Personalvorsorgestiftung der GlaxoSmithKline Schweiz 72
- Personalvorsorgestiftung der Kalaidos Bildungsgruppe Schweiz 85
- Personalvorsorgestiftung der Kern AG 36
- Personalvorsorgestiftung der Rivella AG 37
- Personalvorsorgestiftung der Scherico AG 97
- Personalvorsorgestiftung der Schulthess 16
- Personalvorsorgestiftung der SI Group-Switzerland GmbH 108
- Personalvorsorgestiftung der SV Group 232
- Personalvorsorgestiftung der ZZ Wancor 58
- Personalvorsorgestiftung edifondo 254
- Personalvorsorgestiftung für die Angestellten der Allianz Suisse 691
- Personalvorsorgestiftung Gastrag 21
- Personalvorsorgestiftung Gemeinde Frutigen 10
- Personalvorsorgestiftung J. Wagner AG 28
- Personalvorsorgestiftung Region Emmental 187
- Personalvorsorgestiftung Sudan Partner AG 2
- Personalvorsorgestiftung Visana 292
- Phenix Fondation collective de prévoyance 97
- PK Generali Schweiz 431
- PKG Pensionskasse 1'939
- Previcab Caisse de Pensions de Nexans Suisse SA 334
- Previs Personalvorsorgestiftung Service Public 2'065
- Publica Pensionskasse des Bundes 28'416
- PVST der OC Oerlikon Balzers AG 274
- Raiffeisen Pensionskasse 1'211
- Sammelstiftung Vita 5'108
- Sammelstiftung Vita Invest der Zürich Versicherungs-Gesellschaft 273
- Schindler Pensionskasse 1'552
- SFS Pensionskasse 340
- SIG Pensionskasse 613
- Skycare Foundation de Prévoyance de Skyguide 1'039
- Spida Personalvorsorgestiftung 593
- Stiftung für die Zusatzvorsorge der Angestellten der Allianz Suisse 4
- Sulzer Vorsorgeeinrichtung 4'164
- Swisscanto Pensionskasse 99
- Swisscanto Sammelstiftung der Kantonalbanken 3'744
- Swisscanto Supra 150
- Synthes Vorsorgestiftung 252
- Valora Pensionskasse VPK 755
- Varian Foundation 50
- Varian Foundation 150
- Versicherungseinrichtung des Flugpersonals der Swissair 1'242
- Versicherungskasse der Evang. Mittelschule Schiers 78
- Versicherungskasse der Stadt St.Gallen Personalamt 839
- Versicherungskasse des Bankgeschäftes Rüd Blass & Cie AG 43

▪ Versicherungskasse für das Staatspersonal des Kantons St.Gallen	3'044
▪ Vorsorge Kolb-Gruppe	30
▪ Vorsorge Ruag	1'226
▪ Vorsorgeeinrichtung 1 der Zürich Versicherungs-Gruppe	2'320
▪ Vorsorgeeinrichtung der St. Galler Kantonalbank	454
▪ Vorsorgeeinrichtung der Stutz-Gruppe	62
▪ Vorsorgeeinrichtung der Suva	1'910
▪ Vorsorgeeinrichtung der Wärtsilä Schweiz AG	224
▪ Vorsorgestiftung der Basler, Versicherungs-Gesellschaft	1'793
▪ Vorsorgestiftung der JRG Gunzelhauser AG	91
▪ Vorsorgestiftung Panetta Gruppe	3
▪ Vorsorgestiftung Porta + Partner	6
▪ Vorsorgestiftung SMP	84
▪ Zuger Pensionskasse	2'148
▪ Zusatzpensionskasse der Dätwyler Gruppe	52

Source: Based on data from the Swisscanto pension fund survey 2008 (pp. 61-68)

9. LITERATURE

- Accenture. (2010). A new era of sustainability, UN Global Compact-Accenture CEO study 2010. Retrieved July 1, 2010, from www.unglobalcompact.org/docs/news_events/8.1/UNGC_Accenture_CEO_Study_2010.pdf
- Adam, A. M., & Shavit, T. (2008). How can a ratings-based method for assessing corporate social responsibility (CSR) provide an incentive to firms excluded from socially responsible investment indices to invest in CSR? Journal of Business Ethics. Vol. 82, No. 4, pp. 899-905.
- Albareda Vivo, L., & Balaguer Franch, M. R. (2009). The challenges of socially responsible investment among institutional investors: exploring the links between corporate pension funds and corporate governance. Business and Society Review, Vol. 114, No. 1, pp. 31-57.
- Alchian, A. A., & Demsetz, H. (1972). Production, information costs and econmic organization. American Economic Review, Vol. 62, No. 5, pp. 777-795.
- Allianz Global Investors. (2008). Allianz Global Investors Eco-Trends Investing Survey. Retrieved March 06, 2008, from www.allianzinvestors.com/imageLibrary/promotions/EcoTrendsMedia/survey.html
- Amacker, K. (2000). Keine Angst vor Killerphrasen! Frauen im Pensionskassenstiftungsrat sind wichtig. Retrieved August 27, 2010, from www.kathrin-amacker.ch/presse/artikel/a19.html
- Amalric, F. (2004a). Pension funds, corporate responsibility and sustainability. Retrieved March 24, 2008, from www.ccrs.uzh.ch/images/WP01-FA_0404.pdf
- Amalric, F. (2004b). Shareholder activism as information sharing. Retrieved November 8, 2009, from www.ccrs.uzh.ch/images/WP04-FA_0411.pdf
- Amalric, F., & Hauser, J. (2004a). Micro-economic foundations of corporate responsibility activities. Retrieved March 17, 2010, from www.ccrs.uzh.ch/images/WP02-FAJH_0410.pdf
- Amalric, F., & Hauser, J. (2004b). The design of a corporate responsibility policy: From the identification of issues to the selection of activities. Retrieved June 16, 2009, from www.ccrs.uzh.ch/images/b02-fajh_designofacrpolicy_0412.pdf
- Ambachtsheer, J. (2005). Mercer Insights. Retrieved November 4, 2007, from www.mercer.com/referencecontent.jhtml?idContent=1181715
- Ambachtsheer, J. (2006a). Perspectives on responsible investment. Retrieved January 7, 2010, from www.mercer.com/usrisurvey
- Ambachtsheer, J. (2006b). Responsible investment: What is it all about? Retrieved July 24, 2009, from www.pensionsatwork.ca/english/pdfs/lectures/AmbachtsheerSlides.pdf
- Ammann, M., & Zingg, A. (2008a). Performance and governance of Swiss pension funds. Retrieved September 25, 2009, from www.alexandria.unisg.ch/publications/47632
- Ammann, M., & Zingg, A. (2008b). Relationship between pension fund characteristics and performance: An empirical investigation of Swiss pension funds. Retrieved March 28, 2008, from www.scribd.com/docinfo/2279032?access_key=key-mckak58z155ua79dcor
- Anderson, D. (1996). Learning for a better world. Retrieved July 1, 2007 from www.bwz.com/BWZ/9604/aboutsau.htm#contributor
- Arrington, G. R. (1999). Socially conscious investments by private pension plans. Employee Benefits Journal, Vol. 24, No. 1, pp. 13-16.
- Assembly, UN General. (1999). Report of the World Commission on Environment and Development, A/RES/42/187. Retrieved November 16, 2007, from www.un.org/documents/ga/res/42/ares42-187.htm

- Association of British Insurers. (2004). ABI announces positive gear change for corporate responsibility but urges analysts to wake up to its importance for the bottom line. Retrieved June 17, 2007 from www.abi.org.uk/NewsReleases/viewNewsRelease.asp?nrid=9557
- Avanzi SRI Research. (2006). Green, social and ethical funds in Europe. 2006 Review. Retrieved Mai 14, 2009, www.avanzi-sri.org/pdf/complete_report_2006_final.pdf
- Bagwell, L. S. (1991). Shareholder heterogeneity: Evidence and implications. American Economic Review, Vol. 81, No. 2, pp. 218-221.
- Bainbridge, S. M. (2005). Shareholder activism and institutional investors. UCLA School of Law, Law-Econ Research Paper No. 05-20.
- Baker, K. H., & Haslem, J. A. (1974). Toward the development of client-specified valuation models. The Journal of Finance, Vol. 29, No. 4, pp. 1255-1263.
- Baker, M. (2008). Ethics and financial performance: The big question – is there really a business case? Retrieved April 2, 2009, from www.ethicalcorp.com/content.asp?ContentID=5876
- Bandel, C. (2007). Nest outperforms Swiss funds in SRI approach. Retrieved July 4, 2008 from www.ipe.com/news/Nest_outperforms_Swiss_funds_in_SRI_approach_25492
- Bandel, C. (2008a). APG makes single ESG divestment. Retrieved November 8, 2009, from www.ipe.com/articles/print.php?id=28114
- Bandel, C. (2008b). Dutch preachers launch SRI index fund. Retrieved April 28, 2008, from www.ipe.com/news/Dutch_preachers_launch_SRI_index_fund_27819.php
- Bandel, C., & Stewart, N. (2008). 'Lacking conventions' limits Swedish SRI practice. Retrieved January 26, 2009, from www.ipe.com/news/Lacking_conventions_limits_Swedish_SRI_practice_27421.php
- Bank for International Settlements. (2007). Institutional investors, global savings and asset allocation, report submitted by a Working Group established by the Committee on the Global Financial System. Basel: Committee on the Global Financial System. Retrieved February 16, 2008, from www.bis.org/publ/cgfs27.pdf
- Barber, B. M. (2006). Monitoring the monitor: Evaluating CalPERS' activism. Retrieved November 16, 2007, www.socialinvest.org/pdf/research/Moskowitz/2006WinningPaper.pdf
- Barna, M. (2008). Faith-based mutual funds a $17.5 billion industry. The Gazette (Colorado Springs). Retrieved February 12, 2009, www.gazette.com/articles/based-38647-billion-faith.html
- Barringer, F. (2006). Feel-good investing with profits, too. The New York Times. Retrieved May 19, 2006, www.nytimes.com/2006/05/17/business/businessspecial2/17invest.html
- Baue, W., & Thomsen, M. (2003). AFL-CIO advocates active ownership as a way to enhance shareowner value. Retrieved December 15, 2008, from www.socialfunds.com/news/article.cgi/1220.html
- Bauer, R., Derwall, J., & Otten, R. (2007). The ethical mutual fund performance debate: New evidence from Canada. Journal of Business Ethics, Vol. 70, No. 2, pp. 111-124.
- Bauer, R., Koedijk, K., & Otten, R. (2002). International evidence on ethical mutual fund performance and investment style. Retrieved June 26, 2010, from www.socialinvest.org/pdf/research/Moskowitz/2002%20Winning%20Paper%20-%20Moskowitz.pdf
- Beal, D. J., & Goyen, M. (1998). Putting your money where your mouth is: A profile of ethical investors. Financial Services Review, Vol. 7, No. 2, pp. 129-144.
- Beal, D. J., Goyen, M., & Phillips, P. (2005). Why do we invest ethically? Journal of Investing, Vol. 14, No. 3, pp. 66-77.
- Beamtenversicherungskasse des Kantons Zürich. (2003). Geschäftsbericht der Beamtenversicherungskasse des Kantons Zürich. Retrieved March 15, 2007, from www.bvk.ch/files/BVK_GB_2003.pdf

- Becht, M., Franks, J., Mayer, C., & Rossi, S. (2009). Returns to shareholder activism: Evidence from a clinical study of the Hermes UK Focus Fund. Review of Financial Studies Vol. 22, No. 8, pp. 3093-3129.
- Bengtsson, E. (2008). A history of Scandinavian socially responsible investing. Journal of Business Ethics, Vol. 82, No. 4, pp. 969-983.
- Benijts, T. (2010). A framework for comparing socially responsible investment markets: an analysis of the Dutch and Belgian retail markets. Business Ethics: A European Review, Vol. 19, No. 1, pp. 50-63.
- Berezin, V., & Wood, D. (2009). The evolution of responsible investment consulting workshop state of the union/state of the field. Retrieved October 9, 2009, from www.bcccc.net/document/docWindow.cfm?fuseaction=document.viewDocument&documentid=1331&documentFormatId=2359
- Berglöf, E., & von Thadden, E. L. (1994). Short term versus long term interests: A model of capital structure with multiple investors. Quarterly Journal of Economics, Vol. 109, No. 4, pp. 1055-1084.
- Bielak, D., Bonini, S. M., & Oppenheim, J. M. (2007). CEOs on strategy and social issues. The McKinsey Quarterly.
- Bingham, K. (2008). Could institutional investors have prevented the credit crisis? Retrieved December 12, 2008, from www.responsible-investor.com/home/article/kit/
- Black, B. S. (1990). Shareholder passivity reexamined. Michigan Law Review, Vol. 89, No. 3, pp. 520-608.
- Black, B. S. (1992). Agents watching agents: The promise of institutional investor voice. UCLA Law Review, Vol. 39, No. 4, pp. 811-893.
- Boasson, V., Cheng, J., & Boasson, E. (2004, October). Are investment managers investing ethically at a disadvantage? Journal of Applied Management and Entrepreneurship, October, pp. 56-65.
- Bodt, J., & Sherman, H. (2004). The market impact of corporate governance ratings. In P. Raynard, AccountAbility Forum Issue 3, Special issue on Mainstreaming Responsible Investment (pp. 72-81). London: Greenleaf.
- Boerner, H. (2005). Pension fund "socialism" and the American economy. Corporate Finance Review, November/ December, pp. 39-44.
- Boston College Center for Corporate Citizenship. (2007). Handbook on responsible investment across asset classes. Retrieved February 23, 2010, from www.bcccc.net/index.cfm?fuseaction=document.showDocumentByID&DocumentID=1170
- Brancato, C. K., & Rabimov, S. (2007). The 2007 institutional investment report. Retrieved February 13, 2009, from www.conferenceboard.ca/documents.aspx?did=1911
- Brancato, C. K., & Rabimov, S. (2008). The 2008 institutional investment report. Retrieved February 13, 2009, from www.conference-board.org/publications/describe.cfm?id=1548
- Brill, H., Feigenbaum, C., & Brill, J. A. (1999). Investing with your values. Bloomberg Press.
- Brooksbank, D. (2005). ABP joins Enhanced Analytics Initiative. Retrieved December 13, 2005, from www.ipe.com/news/abp-joins-enhanced-analytics-initiative_1347.php?categoryid=491
- Brown, C. (1998). Rise of the institutional equity funds: Implications for managerialism. Journal of Economic Issues, Vol. 32, No. 3, pp. 803-821.
- Brown, J. (2007). Going green: How financial services are failing ethical consumers. Retrieved November 13, 2008, from www.neweconomics.org/gen/uploads/ouqvkh55cdlpcwmfx1r1hiz005102007170316.pdf
- Bruyn, S. T. (1987). The field of social investment. Cambridge: Cambridge University Press.

- Bundesamt für Statistik (BFS). (2004). Pensionskassenstatistik 2002: Die berufliche Vorsorge in der Schweiz, 2002. Retrieved April 21, 2008, from www.bfs.admin.ch/bfs/portal/de/index/news/publikationen.html?publicationID=1392
- Burkhard, H. P. (2007). Stiftungsrat und Anlageerfolg: Ein Blick auf bemerkenswerte Korrelationen. Retrieved September 21, 2009, from www.swisscanto.ch/.magnolia/protected/pdfLink/show.set-18498.language-de.pdf
- Bushee, B. J. (1998). The influence of institutional investors in myopic R&D investment behavior. Accounting Review, Vol. 73, No. 3, pp. 305-334.
- Business for Social Responsibility. (2008). Environmental, social and governance: Moving to mainstream investing? Retrieved September 07, 2008, from www.bsr.org/reports/BSR_ESG_Mainstream_Investing.pdf
- Butz, C., & Pictet, O. (2008). Das SRI-Performance-Paradox, Messung und Reporting der extra-finanziellen Performance nachhaltiger Anlagen. Retrieved Mai 12, 2008, from ch.e-fundresearch.com/resource.php?mID=3910
- Buzby, S. L., & Falk, H. (1979). Demand for social responsibility information by university investors. The Accounting Review, Vol. 54, No. 1, pp. 23-37.
- Byrd, J., Parrino, R., & Pritsch, G. (1998). Stockholder-manager conflicts and firm value. Financial Analysts Journal, Vol. 54, No. 3, pp. 14-30.
- Caerlewy-Smith, E., Clark, G. L., & Marshall, J. C. (2006). Agitation, resistance, and reconciliation with respect to socially responsible investment: the attitudes of UK pension trustees and Oxford graduates. Environment and Planning, Vol. 38, No. 9, pp. 1585-1589.
- Calvert. (2006). Attitudes toward socially responsible investing. Retrieved February 7, 2009, from www.calvertgroup.com/pdf/yankelovich_2006.pdf
- Campanale, M. (2005). Is there a psychological profile of the ethical investor? In J. Hancock, An Investor's Guide to Ethical Funds (pp. 77-92). London: Kogan Page.
- Campell, J. Y., & Viceira, L. M. (2002). Strategic asset allocation, portfolio choice for long term investors. Oxford: Oxford University Press.
- Canadian Democracy and Corporate Accountability Commission. (2002). The new balance sheet, corporate profits and responsibility in the 21st century. Retrieved February 6, 2009, from www.corporate-accountability.ca
- Carbon Disclosure Project. (2009). Investor research project: Investor use of CDP data. Retrieved November 15, 2009, from webadmin.cdproject.net/CDPResults/67_329_204_CDP_Investor_Research_Project_2009.pdf
- Carroll, A. B. (1979). A three dimensional conceptual model of corporate social performance. The Academy of Management Review, Vol. 4, No. 1, pp. 497-505.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. Business Horizons, July/August, pp. 39-48.
- Carroll, A. B. (1999). Corporate social responsibility evolution of a definitional construct. Business & Society, Vol. 38, No. 3, pp. 268-295.
- Carter, R. E. (2009). Will consumers pay a premium for ethical information? Social Responsibility Journal, Vol. 5, No. 4, pp. 464-477.
- CCRS. (2004). Issues of sustainability: challenges and opportunities for a Swiss private banking firm and asset manager. Zürich: CCRS.
- CFA Institute. (2008). Environmental, social, and governance factors at listed companies: A manual for investors. Retrieved January 31, 2010, from www.cfapubs.org/toc/ccb/2008/2008/2

- Clark, G. L., & Hebb, T. (2002). Understanding pension fund corporate engagement in a global arena. Retrieved July 6, 2008, from www.clcr.org/publications/html/Hebb%20Understanding%20Corporate%20Engagement%20111402.htm
- Clark, G. L., & Hebb, T. (2004). Why do they care? The market for corporate global responsibility and the role of institutional investors. Retrieved March 13, 2000 from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=790486
- Clark, G. L., & Monk, A. H. (2009). The legitimacy and governance of Norway's sovereign wealth fund: The ethics of global investment. Retrieved March 14, 2010, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1473973
- Clark, G. L., & Urwin, R. (2008). Best-practice pension fund governance. Journal of Asset Management Vol. 9, pp. 2-21.
- Clark-Murphy, M., & Soutar, G. (2005). Individual investor preferences: A segmentation analysis. Journal of Behavioral Finance, Vol. 6, No. 1, pp. 6-14.
- Clarkson, M. E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. Academy of Management Review, Vol. 20, No. 1, pp. 92-117.
- Claymore Securities. (2007). Claymore Launches First Socially Responsible ETF Based on Sudan Divestment Issue. Retrieved July 10, 2007, from www.csrwire.com/PressRelease.php?id=8997
- Coffey, B. S., & Fryxel, G. E. (1991). Institutional ownership of stock and dimensions of corporate social performance: An empirical examination. Journal of Business Ethics, pp. 437-444.
- Cortez, M. C., Silva, F., & Areal, N. (2008). The performance of European socially responsible funds. Retrieved June 16, 2010, from www.ifk-cfs.de/fileadmin/downloads/events/conferences/2008-Asset_Cortez_Silva_Areal.pdf
- Cowton, C. J. (1993). Peace dividends: The exclusion of military contractors from investment portfolios. Journal of Peace Research, Vol. 30, No. 1, pp. 21-28.
- Cowton, C. J. (1999). Playing by the rules: Ethical criteria at an ethical investment fund. Business Ethics, A European Review, Vol. 8, No. 1, pp. 60-69.
- Cox, P., Brammer, S., & Millington, A. (2004). An empirical examination of institutional investor preferences for corporate social performance. Journal of Business Ethics, Vol. 52, No. 1, pp. 27-43.
- Crook, C. (2005). The good company. Retrieved April 2, 2009, from www.economist.com/displayStory.cfm?story_ID=3555212
- Cullis, J. G., & Lewis, A. (1992). Paying to be good? U.K. ethical investments. Kyklos, Vol. 45, No. 1, pp. 3-24.
- Cumming, D., & Johan, S. (2007). Socially responsible institutional investment in private equity. Journal of Business Ethics, Vol. 75, No. 4, pp. 395-416.
- Curran, M. M., & Moran, D. (2007). Impact of the FTSE4Good index on firm price: An event study. Journal of Environmental Management, Vol. 82, No. 4, pp. 529-537.
- David, P., Kochhar, R., & Levitas, E. (1998). The effect of institutional investors on the level and mix of CEO compensation. Academy of Management Journal, Vol. 41, No. 2, pp. 200-208.
- Davis, K. (1973). The case for and against business assumption of social responsibilities. Academy of Management Journal, Vol. 16, No. 2, pp. 312-322.
- Davis, N., & Tyrrell, M. (2008). Sustainability funds surviving market fallout. Citigroup Global Markets.
- Davis, P. E. (2003). Institutional investors, financial market efficiency, and financial stability. The Pension Institute Discussion Paper, Pi-0303, pp. 1-41.

- Davis, P. E., & Steil, B. (2001). Institutional investors. Cambridge, Massachusetts: The MIT Press.
- Davis, P. E., & Yuwei, H. (2004). Is there a link between pension-fund assets and economic growth? A cross-country study. Retrieved July 04, 2008, from http://bura.brunel.ac.uk/bitstream/2438/978/1/04-23.pdf
- De Groot, W., & Churet, C. (2009). Alpha from sustainability. Retrived July 20, 2009 from www.sam-group.com/downloads/about/sam_press_releases/090713_whitepaper_alpha_from_sustainability_e.pdf
- Del Guercio, D., & Hawkins, J. (1999). The motivation and impact of pension fund activism. Journal of Financial Economics, Vol. 52, No. 3, pp. 293-340.
- Dembinski, P. H., Bonvin, J. M., Dommen, E., & Monnet, F. M. (2003). The ethical foundations of responsible investment. Journal of Business Ethics, Vol. 48, No. 2, pp. 203-213.
- Demsetz, H., & Lehn, K. (1985). The structure of corporate ownership: Causes and consequences. Journal of Political Economy, Vol. 93, No. 6, pp. 1155-1178.
- Department for Work and Pensions. (2006). Personal accounts: A new way to save Personal. Retrieved March 9, 2009, from www.dwp.gov.uk/pensionsreform/pdfs/PA_PersonalAccountsFull.pdf
- Department of the Environment and Heritage. (2003). Corporate sustainability: An investor perspective: The Mays Report. Canberra: Department of the Environment and Heritage.
- Derwall, J., Guenster, N., Bauer, R., & Koedijk, K. (2005). The eco–efficiency premium puzzle. Financial Analysts Journal, Vol. 61, No. 2, pp. 51-63.
- Deutsche Bank. (2007). Microfinance: An emerging investment opportunity – Uniting social investment and financial returns. Retrieved Mai 12, 2008, from www.dbresearch.com
- Di Bartolomeo, D. (2000). A view of tobacco divestiture by CalSTRS. Retrieved November 21, 2009, from www.northinfo.com/documents/68.pdf
- Di Bartolomeo, D., & Kurtz, L. (1999). Managing risk exposures of socially screened accounts. Retrieved June 6, 2010, from www.northinfo.com/documents/63.pdf
- Diamantopoulos, A., Schlegelmilch, B. B., Sinkovics, R. R., & Bohlen, G. M. (2003). Can sociodemographics still play a role in profiling green consumers? A review of the evidence and an empirical investigation. Journal of Business Research, Vol. 56, No. 6, pp. 465-480.
- Dillenburg, S., Greene, T., & Erekson, H. O. (2003). Approaching socially responsible investment with a comprehensive ratings scheme: Total social impact. Journal of Business Ethics, Vol. 43, No. 3, pp. 167-177.
- DJSI. (2009). Corporate sustainability assessment criteria. Retrieved December 21, 2009, from www.sustainability-indexes.com/07_htmle/assessment/criteria.html
- Dobrzynski, J. (1993). Relationship investing: A new shareholder is emerging – patient and involved. Business Week, 68-75.
- Dreblow, J. (2005). An introduction to the concept of ethics in investment. In J. Hancock. An investor's guide to ethical & socially responsible investment funds (pp. 5-17). London: Kogan Page.
- Drucker, P. F. (1976). The unseen revolution : how pension fund socialism came to America. London: Heinemann.
- Drucker, P. F. (1995). The pension fund revolution. Transaction Publishers.
- Drut, B. (2009). Sovereign bonds and socially responsible investment. Université Libre de Bruxelles (ULB) – Solvay Brussels School of Economics and Management .
- Dunfee, T. W. (2003). Social investing: Mainstream or backwater? Journal of Business Ethics, Vol. 43, No. 3, pp. 247-252.
- Economie. (2007). Glossary of SRI terms. Retrived October 20, 2007 from http://economie.co.uk/page.php?page=97

- Edmans, A. (2010). Does the stock market fully value intangibles? Employee satisfaction and equity prices. Retrieved June 7, 2010, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=985735
- EIRIS. (1999). Trustees and ethical investment. Retrieved February 6, 2009, from www.eiris.org/files/public%20information%20type%20publications/pensiontrustees99.pdf
- EIRIS. (2003). SRI: How responsible is your pension? London: Ethical Investment Research Service.
- EIRIS. (2006). Publications for the general public and charities. Retrieved June 18, 2007, from www.eiris.org/pages/top%20menu/eiris%20publications/consumer%20guides.htm
- EIRIS. (2007). A brief history of SRI / ethical investment. Retrived October 20, 2007, from www.eiris.org/pages/top%20menu/key%20facts%20and%20figures/history%20of%20ethical%20investment.htm
- EIRIS. (2008). The EIRIS green & ethical funds directory. London: EIRIS. Retrieved May 22, 2010, from www.eiris.org/files/public%20information%20type%20publications/green&ethicalfunddirectory.pdf
- Elkington, J. (1998). Cannibals with forks: The triple bottom line of 21st century business (Conscientious Commerce). Gabriola Island, Canada: New Society Publishers.
- Elkington, J. (1994). Towards the sustainable corporation: Win-win-win business strategies for sustainable development. California Management Review, Vol. 36, No. 2, pp. 90-91.
- Elkington, J. (2004). Enter the triple bottom line. In A. Henriques, & J. Richardson, The triple bottom line: Does it all add up?: Assessing the sustainability of business and CSR (p. 186). London: Earthscan.
- Ellis, A. (2008). Climate change investing for pension funds – commercial decision or altruism? Retrieved December 7, 2008, from www.responsible-investor.com/home/article/cowen/
- English, P. C., Smythe, T. I., & McNeil, C. R. (2004). The “CalPERS effect” revisited. Journal of Corporate Finance, Vol. 10, No. 1, pp. 157-174.
- Enhanced Analytics Initiative. (2005). What are extra financial issues? Retrieved March 21, 2008, from www.enhancedanalytics.com/BNPPAM/assetmanagement/home/jsp/home_indexgp.jsp?BV_SessionID=@@@@0582306461.1206097766@@@@&BV_EngineID=cccfadedgmihdffcefecefedgohdffj.0
- Enhanced Analytics Initiative. (2008). Research centre stage, Four years of the Enhanced Analytics Initiative. Retrieved June 29, 2009 from www.enhanced-analytics.com/portal/Library/Documents/EAI/NEWS/en_LIB05352.pdf
- Entine, J. (2007). Why social investing threatens public employee pension funds. In R. W. Kolb, Corporate retirement security (pp. 174-189). Malden, MA: John Wiley & Sons.
- Environment Ministry Japan. (2003). SRI: An international comparison of investor views. Retrieved March 18, 2008, from www.asria.org/publications/lib/japan/Japan_MoE.pdf
- Epstein, M. J., & Roy, M. J. (1997). Integrating environmental impacts into capital investment decisions. Greener Management International, Vol. 17, pp. 69-88.
- Ethical Council. (2008). Annual Report 2007. Retrieved Mai 12, 2008, from www.ap1.se/en/Financial-information-and-press/Press-releases/NewsContainer/2008/AP-Funds-Ethical-Council-uses-dialogue-to-encourage-corporate-responsibility-/
- Ethical Investment Association. (2006). EIA Research, SRI in Australia and New Zealand. Retrieved June 17, 2007, from www.eia.org.au/html/s02_article/article_view.asp?id=285&nav_cat_id=-1&nav_top_id=-1
- Ethos. (n.s.). Ethos engagement pool. Retrived August 2, 2009, from www.ethosfund.ch/upload/publication/p214d_080723_Ethos_Engagement_Pool_PrsentationsMappe.pdf
- Eurosif. (2003). Socially responsible investment among european institutional investors, 2003 report. Retrieved September 12, 2009, from www.eurosif.org/publications/sri_studies

- Eurosif. (2004). Pension Programme SRI Toolkit. Paris: Eurosif. Retrieved October 10, 2007, from www.eurosif.org/sri-resources/pension-fund-toolkit
- Eurosif. (2006). European SRI Study, 2006. Retrieved June 11, 2007, from www.eurosif.org/publications/sri_studies
- Eurosif. (2009). Investment consultants & responsible investment study. Retrieved December 28, 2008, from www.eurosif.org/publications/sri_studies
- FairPensions. (2008). Investor responsibility? UK fund managers' performance and accountability on 'extra-financial' risks. Retrieved July 4, 2009, from www.fairpensions.org.uk/fairpensions_pdf/FundManagerRanking08.pdf
- Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. Journal of Finance Vol. 25, pp. 383-417.
- Fama, E. F., & French, K. (2007). Disagreement, tastes, and asset prices. Journal of Financial Economics, Vol. 83, No. 3, pp. 667-689.
- Federal Statistical Office. (2009). Die berufliche Vorsorge in der Schweiz Pensionskassenstatistik 2007. Retrieved August 6, 2009, from www.bfs.admin.ch/bfs/portal/de/index/themen/13/22/publ.Document.119725.pdf
- Ferber, M. (2010). Pensionskassenberatung im Interessenkonflikt. Retrieved Januar 22, 2010, from www.nzz.ch/nachrichten/wirtschaft/aktuell/pensionskassenberatung_im_interessenkonflikt_1.4504222.html
- Fixsen, R. (2007). Danish pensions body deems ESG safe. Retrieved September 15, 2008, from www.ipemail.co.uk/news/Danish_pensions_body_deems_ESG_safe_26223.php
- Forstmoser, P. (2005). Exit oder Voice? Das Dilemma institutioneller Investoren. In E. Bucher, C.W. Canaris, H. Honsell, & T. Koller, Norm und Wirkung, Beiträge zum Privat– und Wirtschaftsrecht aus heutiger und historischer Perspektive (pp. 785-822). Bern, München: Stämpfli Verlag AG, Verlag C.H. Beck.
- Fowler, S. C., & Hope, C. (2007). A critical review of sustainable business indices and their impact. Journal of Business Ethics, Vol. 76, pp. 243-353.
- Frauenlob, T. (1998). Anlagephilosophie von Schweizer Pensionskassen. Bern: Verlag Paul Haupt.
- Freeman, E. R. (1984). Strategic management: A stakeholder approach. Boston: Pitman.
- Freestone, O. M., & McGoldrick, P. J. (2008). Motivations of the ethical consumer. Journal of Business Ethics, Vol. 79, No. 4, pp. 445-467.
- Freshfields Bruckhaus Deringer. (2005). A legal framework for the integration of environmental, social and governance issues into institutional investment. UNEP FI Asset Management Working Group.
- Friedman, M. (1970). The social responsibility of business is to increase its profits. Retrieved April 2, 2009, www.colorado.edu/studentgroups/libertarians/issues/friedman-soc-resp-business.html
- Froot, K. A., Perold, A. F., & Stein, J. C. (1991). Shareholder trading practices and corporate investment horizons. NBER Working Paper #3638, p. 54.
- Fuhrmann, S. (2007). Pension funds and socially responsible investing: More risky than responsible business. In R. W. Kolb, Corporate Retirement Security (pp. 151-173). Malden, MA: John Wiley & Sons.
- Furrer, B., & Seidler, A. (2006). Swiss CSR Monitor 2006, Die gesellschaftliche Verantwortung von Unternehmen in der Wahrnehmung der Schweizer Bevölkerung mit Spezialteil Banken und Pensionskassen. Winterthur: Zürcher Hochschule Winterthur, CCRS.
- Gabriel, K. (2008). Es war einmal in Amerika ... Die Geschichte des nachhaltigen Investierens. Politische Ökologie 112-113, pp. 30-33.
- Gasper, J. A., & Schweig, B. B. (1985). Characteristics of state public pension plans that engage in social investing. Benefits Quarterly, Vol. 1, No. 4, pp. 41-50.

- Gay, G. R., & Klaassen, J. A. (2004). Retirement investment, fiduciary obligations, and socially responsible investing. Retrieved Mai 6, 2008, from www.finanzasostenibile.it/finanza/gay.pdf
- Geczy, C. C., Stambaugh, R. F., & Levin, D. (2003). Investing in socially responsible mutual funds. Wharton School, The Rodney L. White Center for Financial Research, p. 50.
- General Board of Pension and Health Benefits of The United Methodist Church. (2007). Investment strategy statement general board of pension and health benefits of the united methodist church. Retrieved December 13, 2008, from www.gbophb.org/UserFiles/file/sri/investment_policy.pdf
- General Board of Pension and Health Benefits of The United Methodist Church. (2008). Socially responsible investing. Retrieved December 13, 2008, from www.gbophb.org/sri_funds/
- Giamporcaro, S., Cassam, S., & Rieu, F. (2007). The new frontiers of SRI: The green investments claiming to be SRI. Paris: novethic études.
- Gil-Bazo, J., Ruiz-Verdú, P., & Santos, A. A. (2008). The performance of socially responsible mutual funds: The role of fees and management companies. Retrieved June 27, 2010, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1307043
- Gillan, S. L., & Starks, L. T. (1999). Relationship investing and shareholder activism by institutional investors. Retrieved July 2010, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=5837
- Gillan, S. L., & Starks, L. T. (2000). Corporate governance proposals and shareholder activism: the role of institutional investors. Journal of Financial Economics, Vol. 57, No. 2, pp. 275-305.
- Gilson, R. J., & Kraakman, R. (1991). Reinventing the outside director: An agenda for institutional investors. Stanford Law Review, Vol. 43, No. 4, pp. 863-906.
- Glac, K. (2009). Understanding socially responsible investing: The effect of decision frames and trade-off Options. Journal of Business Ethics, Vol. 87, No. 1, pp. 41-55.
- Gold, M. (2007). The Canadian association for socially responsible investment. Retrieved February 23, 2009, from www.socialinvestment.ca/documents/MurrayGold-May29-245pm.ppt
- Goodpaster, K. E. (2003). Some challenges of social screening. Journal of Business Ethics, Vol. 43, No. 3, pp. 239-246.
- Gordon, L. A., & Pound, J. (1993). Information, ownership structure, and shareholder voting: evidence from shareholder-sponsored corporate governance proposals. Journal of Finance, Vol. 48, No. 2, pp. 697-718.
- Gorton, G., & Pennacchi, G. (1990). Financial intermediaries and liquidity creation. The Journal of Finance, Vol. 45, No. 1, pp. 49-71.
- Graham, J. R., Campbell, H. R., & Rajgopal, S. (2005). The economic implications of corporate financial reporting. Journal of Accounting and Economics, Vol. 40, pp. 3-73.
- Graves, S. B., & Waddock, S. W. (1994). Institutional owners and corporate social performance. Academy of Management Journal, Vol. 37, No. 4, pp. 1034-1046.
- Green, D. (2001). Just pensions, socially responsible investment and international development. Retrieved July 15, 2008, from http://sd-cite.iisd.org/cgi-bin/koha/opac-detail.pl?biblionumber=37321
- Greenberg Quinlan Rosner Research. (2006). SRI: An understanding of how SRI is viewed by TIAA-CREF participants. Retrieved April 23, 2008, from www.greenbergresearch.com/articles/1709/2082_SRI071306m.pdf
- Gregory, A., Matatko, J., & Luther, R. (2003). Ethical unit trust financial performance: Small company effects and fund size effect. Journal of Business Finance & Accounting, Vol. 24, No. 5, pp. 705-725.
- Grene, S. (2008). A socially responsible mission impossible. The Financial Times. Retrieved 15 April 2009, 23, from www.ft.com/cms/s/0/3a4fda6c-513b-11dd-b751-000077b07658.html

- Griffin, J. J., & Mahon, J. F. (1997). The corporate social performance and corporate financial performance debate. Business & Society, Vol. 36, No. 1, pp. 5-31.
- Grossman, B. R., & Sharpe, W. F. (1986). Financial implications of South African divestment. Financial Analysts Journal, Vol. 42, No. 4, pp. 15-29.
- Guay, T., Doh, J. P., & Sinclair, G. (2004). Non-governmental organizations, shareholder activism, and socially responsible investments: Ethical, strategic, and governance implications. Journal of Business Ethics, Vol. 52, No. 1, pp. 125-139.
- Guerard, J. B. (1997). Is there a cost to being socially responsible in investing? Journal of Forecasting, Vol. 16, No. 7, pp. 475-490.
- Guerard, J. B., & Stone, B. K. (2002). Social screening does not harm performance. Pensions & Investments, Vol. 30, No. 19, pp. 30-31.
- Gujarati, D. N. (2003). Basic econometrics, 4th Edition. West Point: McGraw Hill.
- Guyatt, D. (2005). A summary of the findings of a survey into: "Investment beliefs relating to corporate governance and corporate responsibility". Retrieved January 5, 2008, www.marathonclub.co.uk/Docs/SurveySummary.pdf
- Hagart, G., & Knoepfel, I. (2007). UNEP Finance Initiative. Retrieved June 17, 2007 from www.unepfi.org/publications/investment/index.html
- Haigh, M., & Hazelton, J. (2004). Financial markets: A tool for social responsibility? Journal of Business Ethics, Vol. 52, No. 1, pp. 59-71.
- Hall, S., Pettigrew, N., & Harvey, P. (2006). Public attitudes to personal accounts: Report of a qualitative study. Retrieved March 9, 2009, from www.dwp.gov.uk/asd/asd5/rports2005-2006/rrep370.pdf
- Hamid, N., & Sandford, Y. (2002). Portfolio, index & futures research: Are SRI indices responsible? London: Deutsche Bank.
- Hamilton, S., Jo, H., & Statman, M. (1993, November/ December). Doing well while doing good? The investment performance of socially responsible mutual funds. Financial Analysts Journal, Vol. 49, No. 6, pp. 62-66.
- Harrison, T. (1995). Segmenting the market for retail financial services. The international review of retail, distribution and consumer research, Vol. 5, No. 3, pp. 271-286.
- Hassan, A., Antoniou, A., & Krishna, P. D. (2005). Impact of ethical screening on investment performance: The case of the Dow Jones Islamic Index. Islamic Economic Studies, 2005, Vol. 12-13, No. 1-2, pp. 67-97.
- Hawken, P. (2004). Socially responsible investing. Sausalito, California: Natural Capital Institute.
- Hawley, J. P. (2000). The emergence of universal owners. Retrieved November 21, 2008, from http://www.findarticles.com/p/articles/mi_m1093/is_4_43/ai_64458672/print?tag=artBody;col1
- Hawley, J. P., & Williams, A. T. (2000). The rise of fiduciary capitalism. Philadelphia: University of Pennsylvania Press.
- Hawley, J. P., & Williams, A. T. (2002). Can universal owners be socially responsible investors? In P. Camejo, G. Aiyer, R. Nader, & R. A. Monks, The SRI advantage: Why socially responsible investing has outperformed financially (pp. 151-172). Gabriola Island: New Society Publishers.
- Hebb, T. (2006). The economic inefficiency of secrecy: Pension fund investors' corporate transparency concerns. Journal of Business Ethics, Vol. 63, No. 4, pp. 385-405.
- Heiner, R. A. (1983). The origin of predictable behavior. American Economic Review, Vol. 73, No. 4, pp. 560-597.
- Hellsten, S., & Mallin, C. (2006). Are 'ethical' or 'socially responsible' investments socially responsible? Journal of Business Ethics, Vol. 66, No. 4, pp. 393-406.

- Hemley, D., Morris, D., & Gilde, C. (2005). Antisocially conscious sectors: A benchmark for socially conscious investing. Journal of Investing, Vol. 14, No. 3, pp. 78-81.
- Henderson, J. (2007). Legal threat to pensions arms trade decision. Retrieved January 11, 2010, from www.ipe.com/news/Legal_threat_to_pensions_arms_trade_decision_26392.php
- Henderson, J. (2008). Lords confirm SRI can be applied in UK pensions. Retrieved October 10, 2008, from www.ipe.com/news/Lords_confirm_SRI_can_be_applied_in_UK_pensions_29401.php
- Hesse, A. (2007). Sustainable investments in pension funds – international comparison. Retrieved August 2, 2008, from www.sd-m.de/files/Hesse_SD-M_Swisscanto_Sustainable_Investments_in_Pension_Funds.pdf
- Hesse, A. (2008). Langfristige und Nachhaltige Altervorsorgeinvestments, Eine Studie Führender, Europäischer Pensionsfonds. Zug: Asset4, Deutsches Bundesumweltministerium.
- Hewitt Bacon & Woodrow Limited. (2004). Investing pension funds as if the long term really did matter. Retrieved February 7, 2009, from www.usshq.co.uk/downloads/pdf/all_sections/competition/uss_report.pdf
- Hickman, K. A., Teets, W. R., & Kohls, J. J. (1999). Social investing and modern portfolio theory. American Business Review, Vol. 17, No. 1, pp. 72-78.
- Hill, R. P., Ainscough, T., Shank, T., & Manullang, D. (2007). Corporate social responsibility and socially responsible investing: A global perspective. Journal of Business Ethics, Vol. 70, No. 2, pp. 165-174.
- Hillman, A. J., & Keim, G. D. (2001). Shareholder value, stakeholder management, and social issues: what's the bottom line? Strategic Management Journal, Vol. 22, No. 2, pp. 125-139.
- Hirschmann, A. O. (1970). Exit, voice and loyalty. Cambridge, MA.: Harward University Press.
- Hoepner, A. G., Yu, P. S., & Ferguson, J. (2010). Corporate social responsibility across industries: When can who do well by doing good? Retrieved June 27, 2010, from www.ssrn.com/abstract=1284703
- Holderness, C. G. (2003). A survey of blockholders and corporate control. Economic Policy Review, Vol. 9, No. 1, pp. 51-63.
- Holderness, C. G., & Sheehanb, D. P. (1988). The role of majority shareholders in publicly held corporations An exploratory analysis. Journal of Financial Economics, Vol. 20, pp. 317-346.
- Hong, H., & Kacperczyk, M. (2009). The price of sin: The effects of social norms on markets. Retrieved November 14, 2009, from www.finance.sauder.ubc.ca/~mkacpe/Index/sin.pdf
- Honghui, Z. (2003). Difference of behavior among insiders, institutions, and individual investors: evidence from ownership structure. Retrieved July 20, 2008, from www.ccfr.org.cn/english/cicf2004.php
- Hoppe, H., Schmid-Holz, D., Stückelberger, C., & Weber-Berg, C. (2007). Ethische Geldanlagen und Aktionärsverantwortung. Retrieved December 7, 2008, from www.sek-feps.ch/media/pdf/themen/kirchliche_pensionskassengelder/SEK-Tagungsbericht.pdf
- Hostettler, S. (2008). Fonds ohne Umweltsünder und Bombenbauer. Retrieved November 11, 2009, from www.etfexplorer.com/ch/blog/2008/05/30/fonds-ohne-umweltsunder-und-bomberbauer
- Hudson, J. (2006). The Social Responsibility of the Investment Profession. Charlottesville, Virginia: The Research Foundation of the CFA Institute.
- Hudson, J., & Knott, S. (2005). Q-Series(R):Corporate Social Responsibility, Why try to quantify the unquantifiable? London: UBS Investment Research.
- Hurst, M. (2006). Pour le bien commun. Retrieved November 19, 2008, from www.ipe.com/magazine/Pour_le_bien_commun_18945.php?articlepage=1
- Hutchinson, J. D., & Cole, C. G. (1980). Legal standards governing investment of pension assets for social and political goals. University of Pennsylvania Law Review, Vol. 128, No. 6, pp. 1340-1388.

- Hutton, B. R., D'Antonio, L., & Johnsen, T. (1998). Socially responsible investing, growing issues and new opportunities. Business & Society, Vol. 37, No. 3, pp. 281-305.
- ICCR. (2004). Interfaith Center on Corporate Responsibility. Retrieved December 13, 2008, from www.iccr.org/
- Insight Investment. (2009a). Engagement. Retrieved July 4, 2009, from www.insightinvestment.com/uk/responsibleinvestment/riandcg/engagement/
- Insight Investment. (2009b). Investment Integration. Retrieved July 4, 2009, from www.insightinvestment.com/uk/responsibleinvestment/riandcg/integration/
- Institut für Ökologische Wirtschaftsforschung. (1999). Marktstudie Grünes Geld. Hamm: Ökozentrum Hamm.
- Institute for Sustainable Futures. (2005). Mainstreaming socially responsible investment (SRI): A role for government? Sydney: Institute for Sustainable Futures, University of Technology, Sydney.
- Investment & Pensions Europe Magazine. (2009). IPE European Institutional Asset Management Survey 2009. Retrieved January 17, 2010, from ipe.com/resources/view.php?data=Q2F0ZWdvcnkmODIxNCZjYXRlZ29yaWVzJmZpbGUmSXBlVmlzaXRvciZSZXNvdXJjZQ==&name=EIAMS-2009.pdf
- Jacobs, M. T. (1991). Short term America: The causes and cures of our business myopia. Cambridge: Harvard Business School Press.
- Jamali, D. (2008). A stakeholder approach to corporate social responsibility: A fresh perspective into theory and practice. Journal of Business Ethics, Vol. 82, No. 1, pp. 213-231.
- Jessen, P. (2009). Structured products for sustainable and responsible investment – New objectives in conventional portfolio theory. Retrieved March 18, 2010, from www.carleton.ca/3ci/3ci_files/Documents/Jessen_PRI2009.pdf
- Jin, H. H., Mitchell, O., & Piggott, J. (2006). Socially responsible investment in Japanese pensions. Pacific-Basin Finance Journal, Vol. 14, No. 5, pp. 427-438.
- Johnsen, B. D. (2003). Socially responsible investing: A critical appraisal. Journal of Business Ethics, Vol. 43, No. 3, pp. 219-222.
- Johnson, K. L., & de Graaf, F. J. (2009). Modernizing pension fund legal standards for the 21st century. Retrieved October 3, 2009, from www.sustainablefinancialmarkets.net/wp-content/uploads/2009/02/nsfm_modernizing1.pdf
- Johnson, R. A., & Greening, D. W. (1999). The effects of corporate goverance and institutional ownership types on corporate social responsibility. Academy of Management Journal, Vol. 42, No. 5, pp. 564-576.
- Jones, M. T. (1999). The institutional determinants of social responsibility. Journal of Business Ethics, Vol. 20, No. 2, pp. 163-179.
- Jungk, M. (1999). A practical guide to addressing human rights concerns for companies operating abroad. In M. K. Addo, Human rights standards and the responsibility of transnational corporations (pp. 171-186). The Hague: Kluwer Law International.
- Juravle, C., & Lewis, A. (2008). Identifying impediments to SRI in Europe: A review of the practitioner and academic literature. Business Ethics: A European Review, Vol. 17, No. 3, pp. 285-310.
- Just Pensions. (2005a). An assessment of SRI engagement: A study on supply chain labour standards. Retrieved July 18, 2008, from www.uksif.org/cmsfiles/uksif/justpens-sri-engmt-2005.pdf
- Just Pensions. (2005b). Responsible investment trustee toolkit. London: Just Pensions.
- Kahlenborn, W. (2001). In J. J. Bouma, M. Jeucken, & L. Klinkers, Sustainable banking (pp. 173-186). Netherlands: Greenleaf Publishing.

- Kahn, C., & Winton, A. (1998). Ownership structure, speculation, and shareholder intervention. The Journal of Finance, Vol. 53, No. 1, pp. 99-129.
- Keller, C., & Siegrist, M. (2006). Investing in stocks: The influence of financial risk attitude and values-related money and stock market attitudes. Journal of Economic Psychology, Vol. 27, No. 2, pp. 285-303.
- Kempf, A., & Osthoff, P. C. (2008). SRI funds: Nomen est omen. Journal of Business Finance & Accounting, Vol. 35, No. 9-10, pp. 1276-1294.
- Kempf, A., & Osthoff, P. C. (2007). The effect of socially responsible investing on portfolio performance. European financial management, Vol. 13, No. 5, pp. 908-922.
- Kinder, P. D., & Domini, A. L. (1997). Social screening: Paradigms old and new. The Journal of Investing, Vol. 6, No.4, pp. 12-19.
- Kinder, P. D. (1998). Mission-based investing: Extending the reach of foundations, endowments and NGOs. Cambridge, Mass. Kinder, Lydenberg, Domini & Co.
- Kinder, P. D. (2004a). Pensions & the companies they own: New fiduciary duties in a changing social environment. Retrieved April 4, 2009, from www.kld.com/resources/papers/Pensions_the_Companies_They_Own_KLD07011.pdf
- Kinder, P. D. (2004b). Values and money: A research practitioner’s perspective on values for money. Retrieved November 5, 2007, from www.kld.com/resources/index.html
- Kinder, P. D. (2007). Socially responsible investing: An evolving concept in a changing world. Retrieved October 20, 2007, from www.kld.com/resources/index.html
- KLD Research & Analytics. (2008). KLD compliance social restriction checklist. Retrieved March 10, 2008, from www.kld.com
- Klein, A., & Zur, E. (2006). Entrepreneurial shareholder activism: Hedge funds and other private investors. Retrieved November 20, 2009, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=913362
- Knight, E. R., & Dixon, A. (2009). The role of asset consulting in transforming investment decision-making. Retrieved January 3, 2010, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1507133
- Knoepfel, I. (2009). Observed and expected impacts of the current financial crisis on the investment industry's consideration of ESG and climate-related issues. Retrieved June 28, 2009, from www.climate-mainstreaming.net/esg09.pdf
- Knoepfel, I., & Hagart, G. (2007). Innovation is king. Environmental Finance, February.
- Kochhar, R., & David, P. (1996). Institutional investors and firm innovation: A test of competing hypotheses. Strategic Management Journal, Vol. 17, No. 1, pp. 73-84.
- Koellner, T. (2007). Environmental impacts of conventional and sustainable investment funds compared using input-output life-cycle assessment. Journal of Industrial Ecology, Vol. 11, No. 3, pp. 41-60.
- Kolb, R. W. (2007). Corporate retirement security. Malden, USA: Blackwell Publishing Ltd.
- Konrad, H. (2009). Anforderungen an eine funktionierende Pension Fund Governance. In H. U. Stauffer, Berufliche Vorsorge im Wandel der Zeit, Festschrift "25 Jahre BVG" (pp. 122-140). Zürich: Dike Verlag AG.
- Kreander, N. (2001). An analysis of european ethical funds. Retrieved March 20, 2009, from www.accaglobal.com/pubs/publicinterest/activities/research/research_archive/ACCA-ORP33-001.pdf
- Krebs, C. (2006). Vorsicht bei ethischen Geldanlagen. Retrieved September 13, 2008, from www.fr-online.de/politik/doku---debatte/vorsicht-bei-ethischen-geldanlagen/-/1472608/2884628/-/item/0/-/index.html
- Krohn Gjessing, O. P., & Syse, H. (2007). Norwegian petroleum wealth and universal ownership. Corporate Governance: An International Review, Vol. 15, No. 3, pp. 427-437.

- Kropp, R. (2009). Investment advisors explore ways to incorporate ESG issues into their services. Retrieved December 28, 2009, from www.socialfunds.com/news/article.cgi/2794.html
- Kruger, P. (2009). Maximising shareholder value: Consider the claims of all stakeholders? Working paper, Toulouse School of Economics .
- Krumsiek, B. J. (1997). The emergence of a new era in mutual fund investing: Socially responsible investing comes of age. Journal of Investing, Vol. 6, No. 4, pp. 25-30.
- Krumsiek, B. J. (2010). SRI Toxipedia. Retrieved June 13, 2010, from http://toxipedia.org/display/toxipedia/Socially+Responsible+Investing
- Langbein, J. H., & Posner, R. A. (1980). Social investing and the law of trusts. Michigan Law Review, Vol. 79, No. 1, pp. 72-112.
- Lanoff, I. D. (1980). The social investment of private pension plan assets: May it be done lawfully under ERISA? Labor Law Journal, Vol. 31, No. 7, pp. 387-392.
- Lewellen, W. G., Lease, R. C., & Schlarbaum, G. G. (1977). Patterns of investment strategy and behavior among individual investors. Journal of Business, Vol. 50 No. 3, pp. 296-333.
- Lewis, A. (1999). Morals, markets and green investing. In S. K. Peter E. Earl, The Elgar Companion to Consumer Research and Economic Psychology (pp. 388-392). Bath.
- Lewis, A. (2001). A focus group study of the motivation to invest: 'Ethical/green' and 'ordinary' investors compared. Journal of Socio-Economics,Vol. 30, No. 4, pp. 331-341.
- Lewis, A., & Mackenzie, C. (2000a). Morals, money, ethical investing and economic psychology. Human Relations, Vol. 53, No. 2, pp. 179-191.
- Lewis, A., & Mackenzie, C. (2000b). Support for investor activism among U.K. ethical investors. Journal of Business Ethics, Vol. 24, No. 3, pp. 215-222.
- Lewis, A., & Webley, P. (1994). Ethics and economic affairs. In A. Lewis, & K. E. Wärneryd, Ethics and economic affairs (pp. 171-182). UK: Routledge Chapman & Hall.
- Logsdon, J. M., & Van Buren, H. J. (2009). Beyond the proxy vote: Dialogues between shareholder activists and corporations. Journal of Business Ethics, Vol. 87, No. 2, pp. 353-365
- Lopez, V. M., Garcia, A., & Rodriguez, L. (2007). Sustainable Development and Corporate Performance: A Study Based on the Dow Jones Sustainability Index. Journal of Business Ethics, Vol. 75, pp. 285-300.
- Louche, C. (2004). Ethical Investment : Processes and mechanisms of institutionalisation in the Netherlands 1990-2002. Rotterdam: Erasmus Universiteit Rotterdam, Erasmus University Digital Repository.
- Louche, C., & Lydenberg, S. (2006). Socially responsible investment: differences between Europe and the United States. Retrieved October 23, 2008, from www.vlerick.be/en/2472-VLK/version/default/part/AttachmentData/data/vlgms-wp-2006-22.pdf
- Luck, C., & Pilotte, N. (1993). Domini Social Index Performance. Journal of Investing Vol. 2, No. 3, pp. 60-62.
- Lusenti. (2009). Swiss Institutional Survey. Nyon: Lusenti. Retrieved October 3, 2010, from www.institutionalsurvey.ch/partenaires.php?prm_lang=de
- Luther, R. G., Matatko, J., & Corner, D. C. (1992). The investment performance of UK “ethical” unit trusts. Accounting, Auditing & Accountability Journal, Vol. 5, No. 4, pp. 57-70.
- Lydenberg, S. D. (2002). Envisioning socially responsible investing, A model for 2006. Retrieved March 24, 2010, from www.domini.com/common/pdf/SL_SRI_Vision.pdf
- Lydenberg, S. D. (2007). Universal investors and socially responsible investors: A tale of emerging affinities. Corporate Governance: An International Review, Vol. 15, No. 3, pp. 467-477.

- Macey, J. R. (1997). Institutional investors and corporate monitoring: a demand-side perspective. Managerial and Decision Economics, Vol. 18, No. 7-8, pp. 601-610.
- Mackey, A., Mackey, T. B., & Barney, J. B. (2007). Corporate social responsibility and firm performance: investor preferences and corporate strategies. Academy of Management Review, Vol. 32, No. 3, pp. 817-835.
- Mahapatra, S. (1984). Investor reaction to corporate social accounting. Journal of Business Finance & Accounting, Vol. 11, No. 1, pp. 29-40.
- Mahoney, L., & Roberts, R. W. (2007). Corporate social performance, financial performance and institutional ownership in Canadian firms. Accounting Forum 31, pp. 233-253.
- Makni, R., Francoeur, C., & Bellav, F. (2009). Causality between corporate social performance and financial performance: Evidence from Canadian firms. Journal of Business Ethics, Vol. 89, No. 3, pp. 409-422.
- Mallin, C. A., Saadouni, B., & Briston, R. J. (1995). The financial performance of ethical investment funds. Journal of Business Finance & Accounting, Vol. 22, No. 4, pp. 483-496.
- Malone, D., & Goodin, S. (1997). An analysis of U.S. disinvestment from South Africa: Unity, rights, and justice. Journal of Business Ethics, Vol. 16, No. 16, pp. 1687-1766.
- Maloney, M. P., Ward, M., & Braucht, G. (1975). A revised scale for the measurement of ecological attitudes and knowledge. American Psychologist, Vol. 30, pp. 787-790.
- Marathon Club. (2007). Guidance note for long term investing. Retrieved August 10, 2008, from www.marathonclub.co.uk/Docs/MarathonClubFINALDOC.pdf
- Margolis, J. D., & Walsh, J. P. (2003). Misery loves companies: Rethinking social initiatives by business. Administrative Science Quarterly, Vol. 48, No. 2, pp. 268-305.
- Mariathasan, J. (2004). How proactive? Retrieved November 19, 2008, from www.ipe.com/magazine/How_proactive__16754.php?type=magazine&id=16754
- Markowitz, H. (1952). Portfolio Selection. The Journal of Finance, Vol. 7, No. 1, pp. 77-91.
- Martin, W. (2009). Socially responsible investing: Is your fiduciary duty at risk? Journal of Business Ethics, Vol. 90, No. 4, pp. 549-560.
- Matatko, J., & Luther, R. G. (1994). The performance of ethical unit trusts: Choosing an appropriate benchmark. British Accounting Review, Vol. 26, No. 1, pp. 77-89.
- Mathias, A. (2008). SRI sales surprise in market downturn. Retrieved July 12, 2009, from www.environmental-finance.com/2002/0211nov/srisales.htm
- Mathieu, E. (2000). Response of UK pension funds to the SRI disclosure regulation. Retrieved June 13, 2008, from www.uksif.org/cmsfiles/uksif/ukpfsurv.pdf
- Matterson, H. (2000). Ethics admirable but money comes first. The Australian, p. 35.
- Maug, E. (1998). Large shareholders as monitors: Is there a trade-off between liquidity and control? The Journal of Finance, Vol. 53, No. 1, pp. 65-98.
- Mauritz, C. (2002). Sustainable Investment – Länder Report Schweiz 2002. Hannover: scoris.
- McCallin, J. (2003). Just how ethical is the average UK pension? Retrieved December 12, 2008, from www.ethicalcorp.com/content_print.asp?ContentID=589
- McCann, L., Solomon, A., & Solomon, J. (2003). Explaining the growth in UK socially responsible investment. Journal of General Management, Vol. 28, No. 4, pp. 15-36.
- McKinsey. (2007). Assessing the impact of societal issues: A McKinsey Global Survey. Retrieved July 23, 2008, from www.mckinseyquarterly.com/Assessing_the_impact_of_societal_issues_A_McKinsey_Global_Survey_2077_abstract

- McLachlan, J., & Gardner, J. (2004). A comparison of socially responsible and conventional investors. Journal of Business Ethics, Vol. 52, No. 1, pp. 11-25.
- McWilliams, A., & Siegel, D. (1999). Event studies in management research: Theoretical and empirical issues. Academy of Management Journal, Vol. 40, No. 3, pp. 626-657.
- Meadows, D. H., Meadows, D. L., Randers, J., & Behrens, W. W. (1972). The limits to growth. Universe Books.
- Merrill Lynch and Capgemini. (2007). World wealth report 2007. Retrieved February 12, 2010, from www.capgemini.com/insights-and-resources/by-publication/world_wealth_report_2007/
- Meyers, L. (2004). The myth of socially responsible investing. Retrieved June 19, 2009, from www.fool.com/investing/small-cap/2004/11/22/the-myth-of-socially-responsible-investing.aspx
- Michelson, G., Wailes, N., Van Der Laan, S., & Frost, G. (2004). Ethical investment processes and outcomes. Journal of Business Ethics, Vol. 52, No. 1, pp. 1-10.
- Mills, J., Cocklin, C., Fayers, C., & Holmes, D. (2001). Sustainability, socially responsible investment and the outlook of investment professionals in Australia. Greener Management International, No. 33, pp. 31-45.
- Monks, R. A. (1995). Corporate governance and pension plans: If one cannot sell, one must care. Retrieved July 18, 2008, from www.ragm.com/speeches/1995/corpgov_pension.pdf
- Monks, R. A. (2001). The new global investors. Oxford: Capstone Publishing Limited.
- Monks, R. A. (2009). New capital: Who owns the crisis? Retrieved June 13, 2009, from http://qn.som.yale.edu/content/who-owns-crisis
- Monks, R. A., & Minow, N. (1996). Watching the watchers: Corporate goverance for the 21st century. Cambridge, Mass.: Blackwell Publishers.
- Monks, R. A., & Minow, N. (2001). Corporate governance. Malden (Mass.): Blackwell Publishing Ltd.
- Moskowitz, M. (1972). Choosing socially responsible stocks. Business and Society, Vol. 1, 1: 71-75
- Müller, K. (2002). Corporate governance and globalisation: The role and responsibilities of investors. Retrieved June 28, 2008, from www.ellipson.com/files/debate/debate_summer_02e.pdf
- Munnell, A. H., & Sundén, A. (2004). Social investing: Pension plans should just say "No". Retrieved Mai 10, 2008, from www.finanzasostenibile.it/finanza/munnellsunden.pdf
- Murrmann, K. F., Schaffer, J. D., & Wokutch, R. E. (1984). Social investing by state public employee pension funds. Labor Law Journal,Vol. 35, No. 6, pp. 344-351.
- Nagy, R. A., & Obenberger, R. W. (1994). Factors influencing individual investor behavior. Financial Analysts Journal, Vol. 50, No. 4, pp. 63-68.
- Nesbitt, S. L. (1994). Long term rewards from shareholder activism: A study of the "CalPERS Effect". Journal of Applied Corporate Finance 6, pp. 75-80.
- Neue Zürcher Zeitung. (2009). Nachhaltige Fonds nicht immer nachhaltig. Retrieved July 10, 2009, from www.nzz.ch/nachrichten/wirtschaft/boersen_und_maerkte/nachhaltige_fonds_nicht_immer_nachhaltig_1.2609810.html
- New York City Investment Fund. (2007). Cleantech: A new engine of economic growth for New York State. Retrieved July 4, 2010, from www.nycif.org/pdfs/CleantechReport.pdf
- Nilsson, J. (2008). Investment with a conscience: Examining the impact of pro-social attitudes and perceived financial performance on socially responsible investment behavior. Journal of Business Ethics, Vol. 83, No. 2, pp. 307-325.
- Norges Bank. (2001). Relationship between size, cost and return performance in investmentmanagement. Retrieved January 12, 2009, from www.norges-bank.no/templates/article____41663.aspx

- Norman, W., & MacDonald, C. (2004). Getting to the bottom of "triple bottom line". Business Ethics Quarterly, Vol. 14, No. 2, pp 243-262.
- Norwegian Government Pension Fund. (2007). Government pension fund: Global holding of equities at 31 December 2007. Retrieved January 12, 2008, from www.norges-bank.no/Upload/NBIM/Reports/Holdings/EQ_SPU_all.pdf
- O'Barr, W. M., Conley, J. M., & Brancato, C. K. (1992). Fortune and folly: The wealth and power of institutional investing. Irwin Professional Pub.
- O'Connor, A. M. (2008). The importance of responsible investment: Views from the New Zealand Superannuation Fund. Retrieved August 6, 2009, from Responsible Investor: www.responsible-investor.com/home/article/new_zealand/
- OECD. (2002a). Prudent person rule, standard for the investment of pension fund assets. Retrieved February 15, 2009, from www.oecd.org/LongAbstract/0,3425,en_2649_34853_2488694_1_1_1_1,00.html
- OECD. (2002b). Revised taxonomy for pension plans, pension funds and pension entites. Retrieved January 24, 2010, from www.oecd.org/dataoecd/34/23/2488707.pdf
- OECD. (2003). Institutional investors: Statistical yearbook, 1992-2001, 2003 Edition. Paris: OECD.
- OECD. (2005). Private pensions: OECD classification and glossary, 2005 edition. Retrieved December 12, 2008, from www.oecd.org/dataoecd/0/49/38356329.pdf
- OECD. (2006). Pension fund demand for high-quality long term bonds. Retrieved February 26, 2010, from www.oecd.org/document/36/0,3343,en_2649_34849_1962020_1_1_1_1,00.html
- OECD. (2007). Recent trends and regulatory implications in socially responsible investment for pension funds. Retrieved March 24, 2008, from www.oecd.org/dataoecd/3/0/38550550.pdf
- OECD. (2009). OECD Guidelines for pension fund governance. Retrieved October 17, 2009, from www.oecd.org/dataoecd/18/52/34799965.pdf
- oekom. (2009). oekom corporate rating vodafone group. Retrieved December 21, 2009, from www.oekom-research.de/homepage/oekom_CR_Vodafone_Group.pdf
- Oesch, D. (2000). L'intégration des critères sociaux et écologiques dans la politique d'investissement des caisses de pension en Suisse. Retrieved December 9, 2008, from www.unige.ch/ses/spo/Membres/Enseignants/Oesch-1/Publications/Investissement_caisse_pension_rapport_final.pdf
- O'Neil, R. F., & Pienta, D. A. (1994). Economic criteria versus ethical criteria: Toward resolving a basic dilemma in business. Journal of Business Ethics, Vol. 13, No. 1, pp. 71-79.
- onValues. (2009). Sustainable investments in Switzerland 2008. Retrieved April 26, 2009, from www.onvalues.ch/images/pagecontent/news/09-03_Sustainable_investments_in_Switzerland_2008.pdf
- onValues. (2008). Sustainable investments in Switzerland 2007. Retrieved Mai 2008, 14, from www.onvalues.ch/images/pagecontent/news/Sustainable_investments_in_Switzerland_2007_rev.pdf
- onValues. (2007). Swiss SRI Market Survey per end of December 2006. Retrieved July 11, 2009, from www.onvalues.ch/images/pagecontent/news/Sustainable_investments_in_Switzerland_2006_rev.pdf
- Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. Organization Studies, Vol. 24, No. 3, pp. 403-441.
- Ottawa, B. (2008). Swiss funds dispute caution around SRI. Retrieved January 10, 2010, from www.ipe.com/news/Swiss_funds_dispute_caution_around_SRI_27995.php
- Pava, M. L., & Krausz, J. (1996). The association between corporate social-responsibility and financial performance: The paradox of social cost. Journal of Business Ethics, Vol. 15, No. 3, pp. 321-357.

- Pensionskasse der Staft Luzern. (2008). Jahresbericht 2007. Retrieved August 2, 2009, from www.stadtluzern.ch/assets/pk/pksl_jahresbericht%202007.pdf
- Perino, M. A. (2006). Institutional activism through litigation: An empirical analysis of public pension fund participation in securities class actions. Retrieved November 20, 2009, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=938722
- Perks, R. W., Rawlinson, D. H., & Ingram, L. (1992). An exploration of ethical investment in the UK. The British Accounting Review, Vol. 24, No. 1, pp. 43-65.
- Petersen, H. L., & Vredenburg, H. (2009). Morals or economics? Institutional investor preferences for corporate social responsibility. Journal of Business Ethics, Vol. 90, No. 1, pp. 1-14.
- Pfeifer, F. (2008). Nachhaltigkeit erfolgreich implementieren: Das Beispiel Nest. Zegora Breakfast Seminar, September 25, 2008.
- PGGM. (2006). Responsible investment policy. Retrieved November 13, 2007, from www.pggm.nl/about_pggm/investments/responsible_investment/responsible_investment.asp
- PGGM. (2007a). PGGM exclusions policy. Retrieved 11 13, 2007, from www.pggm.nl/about_pggm/investments/responsible_investment/responsible_investment.asp
- PGGM. (2007b). PGGM listed equity ownership policy. Retrieved November, 13, 2007, from www.pggm.nl/about_pggm/investments/responsible_investment/responsible_investment.asp
- Pierick, T. E., Beekman, V., van der Weele, C. N., Meeusen, M. J., & de Graaff, R. P. (2004). A framework for analysing corporate social performance, Beyond the Wood model. Retrieved April 3, 2009, from http://ageconsearch.umn.edu/bitstream/29081/1/rp040503.pdf
- Piller, C., Sanders, E., & Dixon, R. (2007). Dark cloud over good works of Gates Foundation. Retrieved January 3, 2008, from http://articles.latimes.com/2007/jan/07/nation/na-gatesx07
- Plinke, E. (2002). Sarasin sustainable investment. Retrieved November 9, 2007, from www.sarasin.ch/internet/iech/studiesi_performance_iech.pdf
- Pound, J. (1992). Beyond takeovers: Politics comes to corporate control. Harvard Business Review, Vol. 70, No. 2, pp. 83-94.
- Preesman, L. (2010). Three in four Dutch pension plans adopt SRI. Retrieved February 5, 2010, from www.ipe.com/news/three-in-four-dutch-pension-plans-adopt-sri_33967.php
- Prevost, A. K., & Rao, R. P. (2000). Of what value are shareholder proposals sponsored by public pension funds. Journal of Business, Vol. 73, No. 2, pp. 177-204.
- PricewaterhouseCoopers. (2008). Carbon Disclosure Project report 2008: Global 500. Retrieved March 9, 2009, from https://www.cdproject.net/CDPResults/67_329_143_CDP%20Global%20500%20Report%202008.pdf
- Proffitt, T. W., & Spicer, A. (2006). Shaping the shareholder activism agenda: Institutional investors and global social issues. Strategic Organization, Vol. 4, No. 2, pp. 165-190.
- Queisser, M., & Vittas, D. (2000). The Swiss multi-pillar pension system: Triumph of common sense? Retrieved February 7, 2009, from www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2000/10/07/000094946_00092205342254/Rendered/PDF/multi_page.pdf
- Queisser, M., & Whitehouse, E. (2003). Individual choice in social protection: The case of Swiss pensions. Retrieved December 18, 2008, from www.oecd.org/LongAbstract/0,3425,en_33873108_33873838_7090928_1_1_1_1,00.html
- Rajagopal, S. (2009). The time has come for increased pension fund disclosure. Retrieved February 13, 2010, from http://srimonitor.blogspot.com/2009/09/time-has-come-for-increased-pension.html

- Rauh, J. (2007). Risk shifting versus risk management: Investment policy in corporate pension plans. Retrieved March 16, 2009, from http://papers.nber.org/papers/w13240
- Rauschenberger, R. (2001). Nachhaltiger Shareholder Value: Integration ökologischer und sozialer Kriterien in die Unternehmensführung und in das Portfoliomanagement. Bern: Paul Haupt.
- Redins, L. (2006). ENN, Environmental News Network. Retrieved June 10, 2007 from www.enn.com/today.html?id=10738
- Rees, E. (2008). Client segmentation in wealth management. Dublin: VRL Publishing Ltd.
- Reinhardt, F. L., Stavins, R. N., & Vietor, R. H. (2008). Corporate social responsibility through an economic lens. Retrieved April 2, 2009, from NBER Working Paper No. 13989.
- Responsible Investment Association Australasia. (2008). Responsible investment 2008 benchmark report. Retrieved Mai 2, 2009, from www.responsibleinvestment.org/files/WY8LIPMQKG/RIAA_Responsible_Investment_2008.pdf
- Responsible Investor. (2008). Responsible investment landscape 2008 asset managers. Retrieved July 6, 2009, from www.responsible-investor.com/images/uploads/reports/RI%20Landscape%20Asset%20Managers%20v3.pdf
- Responsible Investor. (2009). Integrating ESG into portfolios. Retrieved June 26, 2009, from www.responsible-investor.com/images/uploads/reports/Integrating_ESG_NY.pdf
- Rich, A. (1990). Wirtschaftsethik, Bd.2, Marktwirtschaft, Planwirtschaft, Weltwirtschaft aus sozialethischer Sicht. Gütersloh: Gütersloher Verlagshaus.
- Richardson, B. J. (2008). Do the fiduciary duties of pension funds hinder socially responsible investment? Banking and Finance Law Review, p. 57.
- Richardson, B. J. (2009). Keeping ethical investment ethical: Regulatory issues for investing for sustainability. Journal of Business Ethics. Vol. 87, No. 4, pp. 555-572.
- Rivoli, P. (2003). Making a difference or making a statement? Finance research and socially responsible investment. Business Ethics Quarterly, Vol. 13, No. 3, pp. 271-287.
- Robeco, Booz & Company. (2008). Responsible investing: A paradigm shift, from niche to mainstream. Retrieved June 27, 2009, from www.robeco.com/eng/images/Whitepaper_Booz&co%20SRI_final_tcm143-113658.pdf
- Rojas, M., M'Zali, B., Turcotte, M. F., & Merrigan, P. (2009). Bringing about changes to corporate social policy through shareholder activism: filers, issues, targets, and success. Business and Society Review, Vol. 114, No. 2, pp. 217-252.
- Romano, R. (1993). Public pension fund activism in corporate governance reconsidered. Columbia Law Review, Vol. 93, No. 4, pp. 795-853.
- Roner, L. (2005). Noted economist says corporate social responsibility is irresponsible. Retrieved June 12, 2010 from www.ethicalcorporation.com/content.asp?ContentID=3415
- Rosen, B. N., Sandler, D. M., & Shani, D. (1991). Social issues and socially responsible investment behavior: A preliminary emipirical investigation. Journal of Consumer Affairs, Vol. 25, No. 2, pp. 221-234.
- Rosenthal, E. (2008). Investment funds' dilemma: Environment or profit. Retrieved November 14, 2008, from www.nytimes.com/2008/11/14/business/worldbusiness/14iht-wbpension.1.17829119.html
- Rowley, T., & Berman, S. (2000). A brand new brand of corporate social performance. Business & Society, Vol. 39, No. 4, pp. 397-418.
- Rudd, A. (1981). Social responsibility and portfolio performance. California Management Review, Vol. 23 No. 4, pp. 55-61.

- Russell, J. (2009). The big interview: Carl Rosén – Step forward shareholders. Retrieved June 28, 2009, from http://www.ethicalcorporation.com/content.asp?ContentID=6505
- Ryan, L. V., & Schneider, M. (2002). The antecedents of institutional investor activism. Academy of Management Review, Vol. 27, No. 4, pp. 554-573.
- Ryter, C. (2007). Pensionskassen müssen ihr Verantwortungsbewusstsein dokumentieren. Retrieved September 21, 2009, from Schweizer Pensionskassenstudie 2007: www.swisscanto.ch/.magnolia/protected/pdfLink/show.set-15712.language-de.pdf
- Sakuma, K., & Louche, C. (2008). Socially responsible investment in Japan: Its mechanism and drivers. Journal of Business Ethics, Vol. 82, No. 2, pp. 425-448.
- SAM. (2008a). Research: Methodology, focus on value. Retrieved March 17, 2008, from www.sam-group.com/htmle/research/methodology/value.cfm
- SAM. (2008b). The Sustainability Yearbook 2008. Retrieved January 11, 2009, from www.sam-group.com/downloads/YB/Yearbook_2008.pdf
- Schäfer, H. (2005). International corporate social responsibility rating systems. Journal of Corporate Citizenship, Vol. 20, pp. 107-120.
- Schäfer, H. (2001a). Ethisch-ökologische Geldanlagen zwischen hell– und dunkelgrün. In U. Schrader, & U. Hansen, Nachhaltiger Konsum – Forschung und Praxis im Dialog, Bd. 10 der Reihe „Marketing und Verbraucherarbeit“ (pp. 120-135). Frankfurt und New York.
- Schäfer, H. (2001b). Triple bottom line investing. Ethik, Rendite und Risiko in der Kapitalanlage. Kreditwesen, No.13, pp. 26-30.
- Schäfer, H. (2004). Ethical investment of German non-profit organizations: Conceptual outline and empirical results. Business Ethics: A European Review, Vol. 13, No. 4, pp. 269-287.
- Schäfer, H., & Stederoth, R. (2002). Portfolioselektion und Anlagepolitik mittels Ethik-Filtern: Ein Überblick zum Stand der empirischen Forschung. Kredit und Kapital, pp. 101-148.
- Schäfer, H., Beer, J., Zenker, J., & Fernandes, P. (2006). Who is who in corporate responsibility rating. Gütersloh: Bertelsmann Stiftung.
- Scheibelhut, T. (1997). What makes a top performing fund? Canadian Investment Review, pp. 34-25.
- Schepers, D. H., & Sethi, P. S. (2003). Do socially responsible funds actually deliver what they promise? Bridging the gap between the promise and performance of socially responsible funds. Business and Society Review, Vol. 108, No. 1, pp. 11-32.
- Scherer, J., Beloe, S., & Knoepfel, I. (2004). Values for money. Retrieved July 2008, 8, from www.sustainability.com/aboutsustainability/article_previous.asp?id=136
- Schneider, J. A. (2009). L'investissement responsable. In H. U. Stauffer, Berufliche Vorsorge im Wandel der Zeit (pp. 167-178). Zürich: Dike Verlag AG.
- Schöchli, H. (2008). Das grösste Marktversagen: Das Klimaproblem aus Sicht der Ökonomie. Der Bund, 6. February.
- Scholand, M. (2004). Triple Bottom Line Investing und Behavioral Finance, Investorenverhalten als Determinante der Entwicklung nachhaltiger Anlageprodukte. Frankfurt: IKO – Verlag für Interkulturelle Kommunikation.
- Scholes, M. S. (1972). The market for securities: Substitution vs price pressure and the effect of information on share price. Journal of Business, Vol. 45, No. 2, pp. 179-211.
- Scholtens, B. (2006). Finance as a driver of corporate social responsibility. Journal of Business Ethics, Vol. 68, No. 1, pp. 19-33.

- Schröder, M. (2007). Is there a difference? The performance characteristics of SRI equity indices. Journal of Business Finance and Accounting 34, No. 05-50, pp. 331-348.
- Schueth, S. (2003). Socially responsible investing in the United States. Journal of Business Ethics, Vol. 43, No. 3, pp. 189-194.
- Schumacher-Hummel, I. (2004). Die Rolle von Pensionskassen im Bereich Socially Responsible Investments – Einflussfaktoren eines aktiven Aktionärstums, Dissertation Nr. 2958. St.Gallen: Dissertation der Universität St.Gallen Hochschule für Wirtschafts–, Rechts– und Sozialwissenschaften (HSG).
- Schwab, S. J., & Thomas, R. S. (1998). Realigning corporate governance: Shareholder activism by labor unions. Michigan Law Review, Vol. 96, No. 4, pp. 1018-1095.
- Schwartz, M. S. (2003). The "ethics" of ethical investing. Journal of Business Ethics, Vol. 43, No. 3, pp. 195-213.
- Schwartz, M. S., Tamari, M., & Schwab, D. (2007). Ethical investing from a jewish perspective. Business and Society Review, Vol. 112, No. 1, pp. 137-161.
- Seidler, A., Amalric, F., & Buomberger, P. (2005). Transnational corporations and human rights: The business implications. Retrieved April 4, 2009, from www.ccrs.uzh.ch/images/WP03-AS_0503.pdf
- Sethi, P. S. (2005). Investing in socially responsible companies is a must for public pension funds: Because there is no better alternative. Journal of Business Ethics, Vol. 56, pp. 99-129.
- Shapiro, J. (1992). Social investing: Origins, the movement since 1970. In P. Kinder, A. Domini, & S. Lydenberg, Social Investment Almanach (pp. 8ff.). New York: Holt & Co.
- Sharpe, W. F. (1964). Capital asset prices: A theory of market equilibrium under conditions of risk. Journal of Fmance 19(3), pp. 425-442.
- Shleifer, A. (1986). Do demand curves for stocks slope down? The Joutnal of Finance, Vol. XLI, No. 3, pp. 579-590.
- Shleifer, A., & Vishny, R. W. (1986). Large shareholders and corporate control. The Journal of Political Economy, Vol. 94, No. 3, Part 1, pp. 461-488.
- Sigg, A., Portmann, J., & Ziegler, S. (2005). Corporate Governance Strukturen von Pensionskassen. Retrieved September 25, 2009, from www.ccrs.uzh.ch/images/wp02-as_0503.pdf
- Signori, S. (2009). Ethical (SRI) funds in Italy: A review. Business Ethics: A European Review, Vol. 18, No. 2, pp. 145-164.
- Smith, M. P. (1996). Shareholder activism by institutional investors: Evidence from CalPERS. Journal of Finance, Vol. 51, No. 1, pp. 227-252.
- Smith, T. (2004). Social investing: Challenging institutional investors to meet their fiduciary responsibilities. Retrieved Mai 11, 2008, from http://greenmoney.org/article.mpl?articleid=357&newsletterid=15
- Smith, T. (2005). Institutional and social investors find common ground. The Journal of Investing, Fall, pp. 57-65.
- Social Investment Forum. (2001). 2001 report on socially responsible investing trends in the United States. Retrieved June 16, 2007 from http://ussif.org/pdf/research/Trends/2001%20Trends%20Report.pdf
- Social Investment Forum. (2003). 2003 report on socially responsible investing trends in the United States. Retrieved July 8, 2008, from www.socialinvest.org/resources/research/documents/2003TrendsReport.pdf
- Social Investment Forum. (2006). 2005 report on socially responsible investing trends in the United States. Retrieved June 11, 2007, from http://ussif.org/pdf/research/Trends/2005%20Trends%20Report.pdf
- Social Investment Forum. (2008). 2007 report on socially responsible investing trends in the United States. Retrieved March 10, 2008, from www.socialinvest.org/pdf/SRI_Trends_Report_2007.pdf

- Social Investment Forum Japan. (2007). 2007 Review of Socially Responsible Investment in Japan. Retrieved Mai 2, 2009, from www.sifjapan.org/document/sri2007_english.pdf
- Social Investment Forum, Mercer Investment Consulting. (2007). Defined contribution plans and socially responsible investing in the United States, a survey of plan sponsors, administrators and consultants. Retrieved April 23, 2008, from http://ussif.org/resources/req/?fileID=8
- Social Investment Organization. (2007). Canadian socially responsible investment review 2006. Retrieved Mai 2, 2009, from www.socialinvestment.ca/documents/caReview2006.pdf.
- Social Investment Organization. (2009). Canadian socially responsible investment review 2008. Retrieved Mai 2, 2009, from www.socialinvestment.ca/documents/caReview2008.pdf
- Sparkes, R. (2000). Social responsible investment comes of age. Professional Investor, June.
- Sparkes, R. (1998). The challenge of ethical investment: Activism assets and analysis. In I. Jones, & M. G. Pollitt, The role of business ethics in economic performance (pp. 141-171). Basingstoke, Hants., United Kingdom: Macmillan Press.
- Sparkes, R. (2001). Ethical investment: Whose ethics, which investment? Business Ethics: A European Review, Vol. 10, No. 3, pp. 194-205.
- Sparkes, R., & Cowton, C. (2004). The maturing of socially responsible investment: A review of the developing link with corporate social responsibility. Journal of Business Ethics, Vol. 52, No. 1, pp. 45-57.
- Spicer, B. H. (1978). Investors, corporate social performance and information disclosure: An empirical study. The Accounting Review, Vol. 53, No. 1, pp. 94-111.
- Spiller, R. (2000). Ethical business and investment: A model for business and society, Journal of Business Ethics, Vol. 27, No.1, pp. 149-160.
- Stapledon, G. P. (1996). Institutional shareholders and corporate governance. Oxford: Oxford University Press, USA.
- Starks, L. T. (1987). Performance incentive fees: An agency theoretic approach. Journal of Financial & Quantitative Analysis, Vol. 22, No. 1, pp. 17-32.
- Statman, M. (2000). Socially responsible mutual funds. Financial Analysts Journal, Vol. 56, No. 3, pp. 30-39.
- Statman, M. (2004). What do investors want? Journal of Portfolio Management, 30th anniversary issue, pp. 153-161.
- Statman, M. (2005a). Normal investors, then and now. Financial Analysts Journal, Vol. 61, No. 2, pp. 31-37.
- Statman, M. (2005b). Socially responsible indexes: Composition, performance and tracking errors. Retrieved April 2, 2009, from www.haas.berkeley.edu/responsiblebusiness/documents/SociallyResponsibleIndexes_Statman.pdf
- Statman, M. (2005c). The religions of social responsibility. The Journal of Investing, Vol. 14, No. 3, pp. 14-22.
- Statman, M., & Glushkov, D. (2008). The wages of social responsibility. Retrieved June 16, 2010, from Working Paper, Santa Clara University: http://ssrn.com/abstract=1372848
- Stenström, C. H., & Thorell, J. J. (2008). Evaluating the performance of socially responsible investment funds: A holding data analysis. Stockholm: Stockholm School of Economics, Master thesis within Finance.
- Stern, N. (2007a). Climate change, ethics and the economics of the global deal. Retrieved January 3, 2010, from www.staffnet.manchester.ac.uk/news/archive/list/display/?id=3303&year=2007&month=12
- Stern, N. (2007b). Stern review on the economics of climate change. Retrieved January 14, 2008, from http://webarchive.nationalarchives.gov.uk/+/http:/www.hm-treasury.gov.uk/sternreview_index.htm
- Steward, M. (2009). Governance for Owners CEO calls for engagement levy. Retrieved from www.ipe.com/news/governance-for-owners-ceo-calls-for-engagement-levy_33066.php

- Stewart, J., van der Laan, S., Frost, G., & Loftus, J. (2008). The investment performance of socially responsible investment funds in Australia. Journal of Business Ethics, Vol. 80, No. 2, pp. 181-203.
- Stewart, N. (2008). Iceland falling behind on SRI issues. Retrieved November 16, 2009, from www.ipe.com/news/Iceland_falling_behind_on_SRI_issues_27979.php
- Stewart, N. (2009). Irish committee to examine NPRF ethical issues. Retrieved March 29, 2009, from www.ipe.com/articles/print.php?id=31016
- Streissler, A. (2009). Hintergrundpapier Finanzkrise: Private Pensionssysteme auf dem Prüfstand. Retrieved October 20, 2009, from www.agnesstreissler.at/wp-content/uploads/2009/06/Private-Pensionssysteme.pdf
- Strømmen, A. (2008). Transparency and trust: Keys to the Norwegian Pension Fund. Retrieved August 26, 2008, from www.norway.org/policy/gpf/norwegian+pension+fund+global.htm
- Sullivan, R. (2009). Towards the effective integration of ESG issues into investment decision-making. Retrieved September 5, 2009, from www.insightinvestment.com/global/documents/riliterature/821056/Effective_integration.pdf
- SustainAbility, Mistra. (2004). Values for money reviewing the quality of SRI research. Retrieved June 2009, 18, from www.sustainability.com/downloads_public/insight_reports/values_money.pdf
- Sustainable Business Institute. (n.s.). Nachhaltiges Investment. Retrieved March 12, 2008, from www.nachhaltiges-investment.org
- Swiss Market Index. (2008). SMI compositions with weights since 1988. Retrieved August 6, 2009, from www.six-swiss-exchange.com/index_info/online/share_indices/smi/smi_additions_eliminations.xls
- Swisscanto. (2008). Die Schweizer Pensionkassen 2007. Retrieved Juy 15, 2009, from www.swisscanto.ch/.magnolia/protected/pdfLink/show.set-15712.language-de.pdf
- Swisscanto. (2009). Die Schweizer Pensionkassen 2008. Retrieved August 16, 2009, from www.swisscanto.ch/.magnolia/protected/pdfLink/show.set-17554.language-de.pdf
- Syse, H. (2008). Investments, universal ownership, and public health. International Library of Ethics, Law, and the New Medicine, Vol. 42, pp. 175-188.
- Szczesny, A., & Wilhelm, A. (2005). Pensionskassen und Nachhaltiges Investment. Retrieved January 15, 2008, from www.scoris.de/download/scoris_pensionskassen-studie_2005.pdf
- Szewczyk, S. H., Tsetsekos, G. P., & Varma, R. (1992). Institutional ownership and the liquidity of common stock offerings. Financial Review, Vol. 27, No. 2, pp. 211-225.
- Takala, T., & Kaariainen, K. (2003). Ethical investment policy of the evangelical lutheran church of Finland. Business Ethics: A European Review, Vol. 12, No. 3, pp. 258-264.
- Tarrow, S. (1998). Power in movement: Social movements and contentious politics (2nd edition). Cambridge United Kingdom: Cambridge University Press.
- Taylor, N. A. (2008). Does 'sustainable' investing compromise the obligations owed by superannuation trustees? Australian Business Law Review, Vol. 36, No. 1, pp 47-61.
- Taylor, W. (1990). Can big owners make a big difference? Harvard Business Review, Vol. 68, No. 5, pp. 70-82.
- Teoh, H. Y., & Shiu, G. Y. (1990). Attitudes towards corporate social responsibility and perceived importance of social responsibility information characteristics in a decision context. Journal of Business Ethics, Vol. 9, No. 1, pp. 71-77.
- Teoh, S. H., & Wong, T. J. (2002). Why new issues and high-accrual firms underperform: The role of analysts' credulity. Review of Financial Studies, Vol. 15, No. 3, pp. 869-900.

- Teoh, S. H., Wazzan, C. P., & Welch, I. (1999). The effect of socially activist investment policies on the financial markets: Evidence from the South African boycott. Journal of Business, University of Chicago Press, Vol. 72, No. 1, pp. 35-89.
- Thaler, R. (1980). Toward a positive theory of consumer choice. Journal of Economic Behaviour and Organisation, Vol. 1, No. 1, pp. 39-60.
- Thamotheram, R. (2008). Investment professionals vote 'ESG' and 'sustainability' as top descriptions. Retrieved September 16, 2008, from www.aqresearch.com/downloads/press_releases/AXA%20IM%20-%20RI%20Survey%20Results%20Release.pdf
- Thamotheram, R., & Wildsmith, H. (2006). Putting the universal owner hypothesis into action: Why large retirement funds should want to collectively increase overall market returns and what they can do about it. Retrieved March 24, 2008, from www.rotman.utoronto.ca/icpm/files/Putting%20the%20Universal%20Owner%20Hypothesis%20into%20Action_Raj%20Thamotheram%20and%20Helen%20Wildsmith.pdf
- The Allan Consulting Group. (2000). Socially responsible investment in Australia. Retrieved December 20, 2008, from www.allenconsult.com.au/publications/view.php?id=252
- TIAA-CREF. (2008). Socially responsible investing at TIAA-CREF: Integrated strategies for influencing positive change. Retrieved February 2, 2009, from www.tiaa-cref.org/pubs/pdf/sri_brochure.pdf
- Tippet, J. (2001). Performance of Australia's ethical funds. The Australian Economic Review, Vol. 34, No. 2, pp. 170-178.
- Tippet, J., & Leung, P. (2001). Defining ethical investment and its demography in Australia. Australian Accounting Review, Vol. 11, No. 3, pp. 44-55.
- Tirole, J. (2001). Corporate governance. Econometrica, Vol. 69, No. 1, pp. 1-35.
- Tkac, P. (2006). One proxy at a time: Pursuing social change through shareholder proposals. Economic Review, Federal Reserve Bank of Atlanta, Vol. 91, No. 3, pp. 1-20.
- UBS. (2005). SRI Market Survey. UBS.
- UBS. (2007a). Education Note, Socially Responsible Investing. Zürich: UBS.
- UBS. (2007b). UBS Dictionary of Banking. Retrieved February 24, 2007, from www.ubs.com/1/e/about/bterms/content_i.html
- UBS Investment Research. (2007). Q-Series: Reacting to climate change. Retrieved September 16, 2008, from www.ubs.com/investmentresearch
- UBS Investment Research. (2008). SRI spotlight: SRI and market risk. Retrieved May 12, 2008, from www.ubs.com/investmentresearch
- UKSIF. (2000). UKSIF report: Response of UK pension funds to the SRI disclosure regulation. Retrieved May 2, 2008, from www.uksif.org/cmsfiles/uksif/ukpfsurv.pdf
- UKSIF. (2007a). History of SRI. Retrieved June 10, 2007 from www.uksif.org/resources/introduction-background/History-of-SRI
- UKSIF. (2007b). Local government: Responsible pension, assessing responsible investment leadership by local government pension schemes. Retrieved Mai 14, 2008, from www.uksif.org/cmsfiles/281411/UKSIF_LocalGov_RespPen.pdf
- UKSIF. (2009). Responsible business: Sustainable pension. Retrieved October 2, 2009, from www.uksif.org/cmsfiles/281411/Sustainable_Pensions_Report_2009.pdf
- UNPRI. (2006). The principles for responsible investment. Retrieved October 9, 2008, from www.unpri.org/principles/

- UNPRI. (2009). Global pension fund leaders call for more active, collaborative owners in response to crisis. Retrieved June 28, 2009, from www.unpri.org/files/PR_statement_final.pdf
- UNEP FI. (2004). The materiality of social, environmental and corporate governance issues to equity pricing. Retrieved August 1, 2008, from www.unepfi.org/fileadmin/publications/amwg/amwg_materiality_equity_pricing_report_2004.pdf
- UNEP FI. (2006). UNEP Finance Initiative. Retrieved June 17, 2007 from Publications: www.unepfi.org/publications/catalogue/index.html
- UNEP FI. (2007). Unlocking value, the scope for environmental, social and governance issues in private banking. Retrieved March 7, 2010, from www.unepfi.org/fileadmin/documents/unlocking_value.pdf
- UNEP FI. (2008a). Bringing the universal owner rationale to life: All you need is water. Retrieved November 17, 2008, from www.unepfi.org/events/2008/water_london/index.html
- UNEP FI. (2008b). Principles for responsible investment work streams. Retrieved September 8, 2008, from www.unpri.org/workstreams/
- UNEP FI. (2009). Fiduciary responsibility: Legal and practical aspects of integrating environmental, social and governance issues into institutional investment. Retrieved July 24, 2009, from www.unepfi.org/fileadmin/documents/fiduciaryII.pdf
- UNEP FI, Mercer. (2007). Demystifying responsible investment performance. Retrieved July 5, 2010, from www.unepfi.org/fileadmin/documents/Demystifying_Responsible_Investment_Performance_01.pdf
- UNEP FI, UKSIF. (2007). Responsible Investment in Focus: How leading public pension funds are meeting the challenge, 2007 Report. Retrieved Mai 14, 2008, from www.uksif.org/cmsfiles/281411/Responsible%20Investment%20in%20Focus%20(April%202007).pdf
- UNISON. (2007). Call to end pensions investment in arms trade. Retrieved December 15, 2008, from www.unison.org.uk/pensions/news_view.asp?did=3387
- Van Beurden, P., & Gössling, T. (2008). The worth of values: A literature review on the relation between corporate social and financial performance. Journal of Business Ethics, Vol. 82, No. 2, pp. 407-424.
- Van der Laan, G., Van Ees, H., & Van Witteloostuijn, A. (2008). Corporate social and financial performance: An extended stakeholder theory, and empirical test with accounting measures. Journal of Business Ethics, Vol. 79, No. 3, pp. 299-310.
- Vance, S. C. (1975). Are socially responsible corporations good investment risks? Management Review, Vol. 64, No. 8, pp. 18-24.
- VBDO. (2007). Responsible investment by Dutch pension funds and pension insurance companies. Retrieved August 10, 2010 from www.vbdo.nl/files/download/103/Responsible_investment_by_Dutch_pension_funds_and_
- Velasquez, M. G. (2001). Business ethics: Concepts and cases, 3rd edition. Prentice Hall, Englewood Cliffs.
- Vetter-Scheiber, I. (2009). Berufliche Vorsorge. Zürich: orell füssli Verlag AG.
- Viederman, S. (2004). Initiative for fiduciary responsibility. Retrieved November 04, 2007, from www.theglobalacademy.org/SV%20Paper3_IFR.asp#_ftn1
- Viederman, S. (2009). The semantics of RI: what are we talking about, Why the nomenclature of responsible investing is important. Retrieved April 11, 2010, from www.responsible-investor.com/home/article/the_semantics_of_ri_what_are_we_talking_about/
- Vigeo. (2006). Definition of SRI: Socially responsible investment. Retrieved June 26, 2009, from www.vigeo.com/csr-rating-agency/en/blogcategory/definition-de-l-isr.html
- Vitell, S. J., Singhapakdi, A., & Thomas, J. (2001). Consumer ethics: An application and empirical testing of the Hunt-Vitell theory of ethics. Journal of Consumer Marketing, Vol. 18, No. 2, pp. 153-178.

- Von Arx, U., & Schäfer, A. (2006). The influence of pension funds on corporate governance. Retrieved Mai 1, 2008, from www.ccrs.uzh.ch/images/Publications/wp0406Schaefer.pdf
- Vyvyan, V., Ng, C., & Brimble, M. (2006). Socially responsible investing: Green attitudes and grey choices. Retrieved February 13, 2009, from www.griffith.edu.au/business/griffith-business-school/pdf/discussion-paper-2006-03-socially-responsible-investing.pdf
- Wahal, S. (1996). Pension fund activism and firm performance. Journal of Financial and Quantitative Analysis, Vol. 31, No. 1, pp. 1-23.
- Wall, G. (1995). General versus specific environmental concern: A western Canadian case. Environment and Behavior, Vol. 27, No. 3, pp. 294-317.
- Ward, H. (2004). Public sector roles in strengthening corporate social responsibility. Retrieved June 15, 2009, from www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2005/12/15/000160016_20051215190252/Rendered/PDF/346560CSR1Taking1Stock.pdf
- Watson Wyatt. (2004). The global investment review. Retrieved February 17, 2007, from www.watsonwyatt.com/europe/pubs/globalinvestment/render2.asp?id=15491
- Watson Wyatt. (2005). Die 20 führenden Pensionseinrichtungen. Retrieved August 6, 2009, from www.watsonwyatt.com/europe/germany/news/pressreleases/press.asp?ID=15201
- Watson Wyatt. (2008). Investing for the future. Retrieved Mai 11, 2008, from www.watsonwyatt.com/research/resrender.asp?id=2007-EU-0550&page=1
- Waygood, S., & Wehrmeyer, W. (2003). A critical assessment of how non-governmental organizations use the capital markets to achieve their aims: a UK study. Business Strategy and the Environment, Vol. 12, No. 6, pp. 372-385.
- Weber, R. H., Wagner, A. F., & Darbellay, A. (2009). Pension Fund Governance: Eine rechtlich–ökonomische Analyse des Stiftungsrates. Der Schweizer Treuhänder, pp. 54-66.
- Webley, P., Lewis, A., & Mackenzie, C. (2001). Commitment among ethical investors: An experimental approach. Journal of Economic Psychology, Vol. 22, No. 1, pp. 27-42.
- Wen, S. (2009). Institutional investor activism on socially responsible investment: Effects and expectations. Business Ethics: A European Review, Vol. 18, No. 3, pp. 308-333.
- Wheelan, H. (2010a). Giant Norway fund relaxes controversial exclusion policy. Retrieved March 13, 2010, from www.responsible-investor.com/home/article/giant_norway/
- Wheelan, H. (2010b). Norwegian fund sells off euro1.8bn in tobacco shares after government ban. Retrieved June 22, 2010, from www.responsible-investor.com/home/article/norwegian_tobacco/
- Wheelan, H. (2008a). 1.5 trillion dollar investor alliance pushes Starbucks, GSK, Carlsberg and peers on water policies. Retrieved December 12, 2008, from www.responsible-investor.com/home/article/15_trillion_dollar_investor_alliance_pushes_starbucks_gsk_carlsberg_and_pee/
- Wheelan, H. (2008b). AP funds report engagement progress on companies including Yahoo!, Wal-Mart, PetroChina. Retrieved November 8, 2009, from www.responsible-investor.com/home/article/ap_funds_report_engagement_progress_on_companies_including_yahoo_wal_mart_a/
- Wheelan, H. (2008c). France's FRR: Blue skies thinking on engagement and ESG manager selection. Retrieved November 19, 2008, from www.responsible-investor.com/home/article/frr1
- Wheelan, H. (2008d). French giant to launch long term investment club for world's biggest funds. Retrieved September 16, 2008 from www.responsible-investor.com/home/article/cdc/

- Wheelan, H. (2008e). Investors get first U.S. executive say-on-pay vote as pressure mounts. Retrieved December 15, 2008, from www.responsible-investor.com/home/article/exec_pay/
- Wheelan, H. (2008f). New Zealand giant lists cluster bomb bans after $37m sell-off. Retrieved January 26, 2009, from www.responsible-investor.com/home/article/cluster4/
- Wheelan, H. (2008g). Norway's biggest investors go direct to companies for ESG data. Retrieved July 25, 2008, from www.responsible-investor.com/home/article/norway1/
- Wheelan, H. (2008h). RI's regular round-up of the most important responsible investment news. Retrieved December 17, 2008, from www.responsible-investor.com/home/print/ri_round_up_dec_9
- Wheelan H. (2007). Nest – Swiss RI pension performance in action. Retrieved December 7, 2007, from www.responsible-investor.com/home/article/nest_swiss_ri_pension_performance_in_action
- Who Cares Wins Initiative. (2009). Future proof? Embedding environmental, social and governance issues in investment markets. Retrieved August 6, 2009, from www.ifc.org/ifcext/sustainability.nsf/AttachmentsByTitle/p_SI_WCW08_report_WEB.pdf/$FILE/p_SI_WCW08_report_WEB.pdf
- Williams, G. (2007). Some determinants of the socially responsible investment decision: A cross-country study. The Journal of Behavioral Finance, Vol. 8, No. 1, pp. 43-57.
- Wilson, R. (1997). Islamic finance and ethical investment. International Journal of Social Economics, Vol. 24, No. 11, pp. 1325-1342.
- Wirth, P. (2008). Das Kriterium der Nachhaltigkeit in der Praxis. Consulté le July 30, 2009, sur Schweizer Pensionskassen 2008: www.swisscanto.ch/.magnolia/protected/pdfLink/show.set-17554.language-de.pdf
- Wong, K., White, A., Pamlin, D., & Reinvang, R. (2008). Fund management in the 21st century: The role of sovereign wealth funds in contributing to a low carbon future. New York: Innovest.
- Wood, D. J. (1991). Corporate social performance revisited. Academy of Management Review, Vol. 16, No. 4, pp. 691-718.
- Woolridge, R. J. (1988). Competitive decline and corporate restructuring: Is a myopic stock market to blame? Journal of Applied Corporate Finance, Vol. 1, No. 1, pp. 5-99.
- World Economic Forum. (2005). Mainstreaming responsible investment. Retrieved July 2008, 8, from www.weforum.org/pdf/mri.pdf
- Yaron, G. (2001). The responsible pension trustee: Reinterpreting the principles of prudence and loyalty in the context of socially responsible institutional investing. Retrieved February 7, 2009, from www.gurn.info/en/topics/corporate-governance/workers-capital/workers-capital-2/the-responsible-pension-trustee-reinterpreting-the-principles-of-prudence-and-loyalty-in-the-context-of-socially-responsible-institutional-investing-gil-yaron-share-2001
- Ziegler, A. (2009). Is it beneficial to be included in a sustainability stock index? A panel data study for European firms. Retrieved April 11, 2010, from www.ccrs.uzh.ch/images/stories/pdf/WP_0409_Is_it_Beneficial_incl._Sustainability_Stockindex.pdf

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